

Revision Number: 005.1 Issue date: 03/13/2017

1. PRODUCT AND COMPANY IDENTIFICATION

Product name: LOCTITE LB 8065 COPPER ANTI- IDH number:

SEIZE STICK known as C5-A® Copper

Anti-Seize Stick

Product type:LubricantItem number:37229Restriction of Use:None identifiedRegion:United States

Company address: Contact information:

Henkel Corporation Telephone: +1 (860) 571-5100

Henkel Way One MEDICAL EMERGENCY Phone: Poison Control Center Rocky Hill, Connecticut 06067 1-877-671-4608 (toll free) or 1-303-592-1711

TRANSPORT EMERGENCY Phone: CHEMTREC 1-800-424-9300 (toll free) or 1-703-527-3887

466863

Internet: www.henkelna.com

2. HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW

WARNING: CAUSES SKIN IRRITATION.

MAY CAUSE AN ALLERGIC SKIN REACTION.

CAUSES SERIOUS EYE IRRITATION.

HAZARD CLASS	HAZARD CATEGORY
SKIN IRRITATION	2
EYE IRRITATION	2A
SKIN SENSITIZATION	1

PICTOGRAM(S)



Precautionary Statements

Prevention: Avoid breathing dust or fumes. Wash affected area thoroughly after handling. Contaminated

work clothing should not be allowed out of the workplace. Wear protective gloves, eye

protection, and face protection. **Response:**IF ON SKIN: Wash with plenty of the protection.

IF ON SKIN: Wash with plenty of water. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If skin irritation or

rash occurs: Get medical attention. If eye irritation persists: Get medical attention. Take off

contaminated clothing.

Storage: Not prescribed

Disposal: Dispose of contents and/or container according to Federal, State/Provincial and local

governmental regulations.

Classification complies with OSHA Hazard Communication Standard (29 CFR 1910.1200) and is consistent with the provisions of the United Nations Globally Harmonized System of Classification and Labeling of Chemicals (GHS).

See Section 11 for additional toxicological information.

3. COMPOSITION / INFORMATION ON INGREDIENTS

IDH number: 466863 Product name: LOCTITE LB 8065 COPPER ANTI-SEIZE STICK known as C5-A® Copper Anti-Seize

Hazardous Component(s)	CAS Number	Percentage*
Copper	7440-50-8	10 - 20
Graphite	7782-42-5	10 - 20
Distillates (petroleum), hydrotreated heavy naphthenic	64742-52-5	10 - 20
Petroleum distillates, hydrotreated, light naphthenic	64742-53-6	10 - 20
Quartz (SiO2)	14808-60-7	0.1 - 1

^{*} Exact percentages may vary or are trade secret. Concentration range is provided to assist users in providing appropriate protections.

4. FIRST AID MEASURES

Inhalation: Move to fresh air. If not breathing, give artificial respiration. If breathing is

difficult, give oxygen. If symptoms develop and persist, get medical attention.

Skin contact: Wash with soap and water. If symptoms develop and persist, get medical

attention.

Eye contact: Immediately flush eyes with plenty of water for at least 15 minutes. Get

medical attention.

Ingestion: Do not induce vomiting. Aspiration may cause pulmonary edema and

pneumonitis. Get medical attention.

Symptoms: See Section 11.

5. FIRE FIGHTING MEASURES

Extinguishing media: Water spray (fog), foam, dry chemical or carbon dioxide.

Special firefighting procedures: None
Unusual fire or explosion hazards: None

Hazardous combustion products: Oxides of carbon.

6. ACCIDENTAL RELEASE MEASURES

Use personal protection recommended in Section 8, isolate the hazard area and deny entry to unnecessary and unprotected personnel.

Environmental precautions: Do not allow product to enter sewer or waterways.

Clean-up methods: Refer to Section 8 "Exposure Controls / Personal Protection" prior to clean up.

For large spills absorb onto inert absorbent material and place in sealed container for disposal. For small spills wipe up with paper towel and place in container for disposal. Scrape up as much material as possible. Clean

residue with soap and water.

7. HANDLING AND STORAGE

Handling: Wash thoroughly after handling. Avoid contact with eyes, skin and clothing.

Keep container closed.

Storage: Keep in a cool, well ventilated area.

For information on product shelf life, please review labels on container or check the Technical Data Sheet.

IDH number: 466863 Product name: LOCTITE LB 8065 COPPER ANTI-SEIZE STICK known as C5-A® Copper Anti-Seize

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Employers should complete an assessment of all workplaces to determine the need for, and selection of, proper exposure controls and protective equipment for each task performed.

Hazardous Component(s)	ACGIH TLV	OSHA PEL	AIHA WEEL	OTHER
Copper	0.2 mg/m3 TWA (as Cu) Fume. 1 mg/m3 TWA (as Cu) Dust and mist.	1 mg/m3 PEL (as Cu) Dust and mist. 0.1 mg/m3 PEL (as Cu) Fume.	None	None
Graphite	2 mg/m3 TWA Respirable fraction.	5 mg/m3 PEL Respirable fraction. 15 mg/m3 PEL Total dust. 15 MPPCF TWA	None	None
Distillates (petroleum), hydrotreated heavy naphthenic	5 mg/m3 TWA Inhalable fraction. 5 mg/m3 TWA mist 10 mg/m3 STEL mist	5 mg/m3 TWA mist 500 ppm (2,000 mg/m3) PEL 5 mg/m3 PEL Mist.	None	None
Petroleum distillates, hydrotreated, light naphthenic	5 mg/m3 TWA Inhalable fraction.	5 mg/m3 PEL Mist. 500 ppm (2,000 mg/m3) PEL	None	None
Quartz (SiO2)	0.025 mg/m3 TWA Respirable fraction.	2.4 MPPCF TWA Respirable. 0.1 mg/m3 TWA Respirable. 0.05 mg/m3 TWA (Respirable dust.) (Respirable dust.) 0.025 mg/m3 OSHA_ACT (Respirable dust.) 0.05 mg/m3 PEL Respirable dust.	None	None

Engineering controls: Use only with adequate ventilation. Local exhaust ventilation is recommended

when general ventilation is not sufficient to control airborne contamination

below occupational exposure limits.

Respiratory protection: Use NIOSH approved respirator if there is potential to exceed exposure

limit(s). Observe OSHA regulations for respirator use (29 CFR 1910.134).

Eye/face protection: Safety goggles or safety glasses with side shields. Full face protection should

be used if the potential for splashing or spraying of product exists.

Skin protection:Use impermeable gloves and protective clothing as necessary to prevent skin

contact.

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical state: Solid Color: Copper Odor: Mild, Petroleum Odor threshold: Not available. pH: Not applicable Vapor pressure: Not determined Boiling point/range: Not available. Melting point/ range: Not available. Specific gravity: 1.18

Vapor density: Not determined

Flash point: Product is a solid. Burn Rate: Approx 14 mm/2 minutes

Flammable/Explosive limits - lower:
Flammable/Explosive limits - upper:
Autoignition temperature:
Not determined
Not determined
Not applicable

IDH number: 466863 Product name: LOCTITE LB 8065 COPPER ANTI-SEIZE STICK known as C5-A® Copper Anti-Seize

Evaporation rate:

Solubility in water:

Partition coefficient (n-octanol/water):

Not determined

Not determined

VOC content: 0 %

Viscosity:Not available.Decomposition temperature:Not available.

10. STABILITY AND REACTIVITY

Stability: Stable at normal conditions.

Hazardous reactions: Will not occur.

Hazardous decomposition

products:

Oxides of carbon.

Incompatible materials: Oxidizing agents.

Reactivity: Not available.

Conditions to avoid: None known

11. TOXICOLOGICAL INFORMATION

Relevant routes of exposure: Skin, Inhalation, Eyes, Ingestion

Potential Health Effects/Symptoms

Inhalation: Inhalation of copper fumes may result in metal fume fever. Symptoms include metallic taste,

discoloration of skin or hair. This product has low volatility and is not expected to cause respiratory tract irritation during normal conditions of use. May cause respiratory tract irritation. Abrasion of cured material such as by sanding or grinding could release respirable particles of silica quartz, a cancer hazard by inhalation. Normal use of this product causes no such release.

Skin contact: Causes skin irritation. May cause allergic skin reaction.

Eye contact: Causes serious eye irritation.

Ingestion: May cause gastrointestinal tract irritation if swallowed. Principal hazard of ingestion is

aspiration into the lungs and subsequent pneumonitis.

Hazardous Component(s)	LD50s and LC50s	Immediate and Delayed Health Effects
Copper	None	Allergen, Blood, Central nervous system, Developmental, Gastrointestinal, Immune system, Irritant, Kidney, Liver, Mutagen, Sensory, Skin
Graphite	None	Lung
Distillates (petroleum), hydrotreated heavy naphthenic	None	Irritant
Petroleum distillates, hydrotreated, light naphthenic	None	Irritant
Quartz (SiO2)	None	Immune system, Lung, Some evidence of carcinogenicity

Hazardous Component(s)	NTP Carcinogen	IARC Carcinogen	OSHA Carcinogen (Specifically Regulated)
Copper	No	No	No
Graphite	No	No	No
Distillates (petroleum), hydrotreated heavy naphthenic	No	No	No
Petroleum distillates, hydrotreated, light naphthenic	No	No	No
Quartz (SiO2)	Known To Be Human Carcinogen.	Group 1	Yes

12. ECOLOGICAL INFORMATION

Ecological information: Not available.

13. DISPOSAL CONSIDERATIONS

Information provided is for unused product only.

Recommended method of disposal: Follow all local, state, federal and provincial regulations for disposal.

Hazardous waste number:Not a RCRA hazardous waste.

14. TRANSPORT INFORMATION

The transport information provided in this section only applies to the material/formulation itself, and is not specific to any package/configuration.

U.S. Department of Transportation Ground (49 CFR)

Proper shipping name: Not regulated

Hazard class or division:
Identification number:
Packing group:
None

IDH number: 466863 Product name: LOCTITE LB 8065 COPPER ANTI-SEIZE STICK known as C5-A® Copper Anti-Seize Stick

International Air Transportation (ICAO/IATA)

Proper shipping name: Not regulated Hazard class or division: None Identification number: None Packing group: None

Water Transportation (IMO/IMDG)

Proper shipping name: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (Copper)

Hazard class or division: Identification number: UN 3077 Packing group: Ш Marine pollutant: Copper

15. REGULATORY INFORMATION

United States Regulatory Information

TSCA 8 (b) Inventory Status: All components are listed or are exempt from listing on the Toxic Substances Control Act

Inventory.

TSCA 12 (b) Export Notification: None above reporting de minimis

CERCLA/SARA Section 302 EHS: None above reporting de minimis.

CERCLA/SARA Section 311/312: Immediate Health

CERCLA/SARA Section 313: This product contains the following toxic chemicals subject to the reporting requirements of

section 313 of the Emergency Planning and Community Right-To-Know Act of 1986 (40

CFR 372). Copper (CAS# 7440-50-8).

California Proposition 65: This product contains a chemical known in the State of California to cause cancer.

Canada Regulatory Information

IDH number: 466863

CEPA DSL/NDSL Status: One or more components are not listed on, and are not exempt from listing on either the

Domestic Substances List or the Non-Domestic Substances List.

16. OTHER INFORMATION

This safety data sheet contains changes from the previous version in sections: New Safety Data Sheet format.

Prepared by: Regulatory Affairs

Issue date: 03/13/2017

DISCLAIMER: The data contained herein are furnished for information only and are believed to be reliable. However, Henkel Corporation and its affiliates ("Henkel") does not assume responsibility for any results obtained by persons over whose methods Henkel has no control. It is the user's responsibility to determine the suitability of Henkel's products or any production methods mentioned herein for a particular purpose, and to adopt such precautions as may be advisable for the protection of property and persons against any hazards that may be involved in the handling and use of any Henkel's products. In light of the foregoing, Henkel specifically disclaims all warranties, express or implied, including warranties of merchantability and fitness for a particular purpose, arising from sale or use of Henkel's products. Henkel further disclaims any liability for consequential or incidental damages of any kind, including lost profits.



Revision Number: 003.0 Issue date: 08/17/2017

1. PRODUCT AND COMPANY IDENTIFICATION

Product name: LOCTITE 680 RETAIN CMPND 10ML IDH number: 1835205 Product type: Anaerobic Adhesive Item number: 1835205 Restriction of Use: None identified

Company address: Henkel Corporation

Henkel Way One

Rocky Hill, Connecticut 06067

Region: **United States**

Contact information:

Telephone: +1 (860) 571-5100

MEDICAL EMERGENCY Phone: Poison Control Center 1-877-671-4608 (toll free) or 1-303-592-1711 TRANSPORT EMERGENCY Phone: CHEMTREC 1-800-424-9300 (toll free) or 1-703-527-3887

Internet: www.henkelna.com

2. HAZARDS IDENTIFICATION

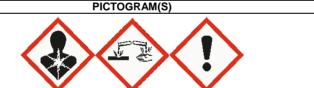
EMERGENCY OVERVIEW

DANGER: CAUSES SKIN IRRITATION.

MAY CAUSE AN ALLERGIC SKIN REACTION.

CAUSES SERIOUS EYE DAMAGE. SUSPECTED OF CAUSING CANCER.

HAZARD CLASS	HAZARD CATEGORY
SKIN IRRITATION	2
SERIOUS EYE DAMAGE	1
SKIN SENSITIZATION	1
CARCINOGENICITY	2



Precautionary Statements

Prevention: Obtain special instructions before use. Do not handle until all safety precautions have been

read and understood. Avoid breathing vapors, mist, or spray. Wash affected area thoroughly after handling. Contaminated work clothing should not be allowed out of the workplace. Wear

protective gloves, clothing, eye and face protection.

Response: IF ON SKIN: Wash with plenty of water. IF IN EYES: Rinse cautiously with water for several

minutes. Remove contact lenses, if present and easy to do. Continue rinsing. IF exposed or concerned: Get medical attention. If skin irritation or rash occurs: Get medical attention. Take

off contaminated clothing.

Storage: Store locked up.

Disposal: Dispose of contents and/or container according to Federal, State/Provincial and local

governmental regulations.

Classification complies with OSHA Hazard Communication Standard (29 CFR 1910.1200) and is consistent with the provisions of the United Nations Globally Harmonized System of Classification and Labeling of Chemicals (GHS).

See Section 11 for additional toxicological information.

3. COMPOSITION / INFORMATION ON INGREDIENTS

Hazardous Component(s)	CAS Number	Percentage*
2-Propenoic acid, 2-methyl-, (1-methylethylidene)	24448-20-2	30 - 40
3,3,5 Trimethylcyclohexyl methacrylate	7779-31-9	10 - 20
2-Hydroxyethyl methacrylate	868-77-9	10 - 20
Polyurethane methacrylate resin	Unknown	5 - 10
Acrylic acid	79-10-7	1 - 5
Hydroxyalkyl methacrylate	27813-02-1	1 - 5
1-Acetyl-2-phenylhydrazine	114-83-0	0.1 - 1
Methacrylic acid	79-41-4	0.1 - 1
Cumene hydroperoxide	80-15-9	0.1 - 1

^{*} Exact percentages may vary or are trade secret. Concentration range is provided to assist users in providing appropriate protections.

4. FIRST AID MEASURES

Inhalation: Move to fresh air. If not breathing, give artificial respiration. If breathing is

difficult, give oxygen. Get medical attention.

Skin contact: Immediately flush skin with plenty of water (using soap, if available). Remove

contaminated clothing and footwear. Wash clothing before reuse. Get medical

attention.

Eye contact: Rinse immediately with plenty of water, also under the eyelids, for at least 15

minutes. Get medical attention.

Ingestion: DO NOT induce vomiting unless directed to do so by medical personnel.

Never give anything by mouth to an unconscious person. Get medical

attention.

Symptoms: See Section 11.

5. FIRE FIGHTING MEASURES

Extinguishing media: Water spray (fog), foam, dry chemical or carbon dioxide.

Special firefighting procedures: Wear self-contained breathing apparatus and full protective clothing, such as

turn-out gear. In case of fire, keep containers cool with water spray.

Uncontrolled polymerization may occur at high temperatures resulting in

explosions or rupture of storage containers.

Hazardous combustion products: Oxides of carbon. Oxides of sulfur. Oxides of nitrogen. Irritating organic

vapours.

6. ACCIDENTAL RELEASE MEASURES

Use personal protection recommended in Section 8, isolate the hazard area and deny entry to unnecessary and unprotected personnel.

Environmental precautions: Do not allow product to enter sewer or waterways.

Clean-up methods: Remove all sources of ignition. Evacuate and ventilate spill area; dike spill to

prevent entry into water system; wear full protective equipment during cleanup. Soak up with inert absorbent material (e.g. sand, silica gel, acid binder, universal binder, sawdust). Scrape up as much material as possible. Store in a partly filled, closed container until disposal. Refer to Section 8 "Exposure

Controls / Personal Protection" prior to clean up.

IDH number: 1835205 Product name: LOCTITE 680 RETAIN CMPND 10ML

7. HANDLING AND STORAGE

Handling: Use only with adequate ventilation. Prevent contact with eyes, skin and

clothing. Do not breathe vapor and mist. Wash thoroughly after handling. Do

not taste or swallow. Refer to Section 8.

For safe storage, store at or below 38 °C (100.4 °F) Storage:

Keep in a cool, well ventilated area away from heat, sparks and open flame.

Keep container tightly closed until ready for use.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Employers should complete an assessment of all workplaces to determine the need for, and selection of, proper exposure controls and protective equipment for each task performed.

Hazardous Component(s)	ACGIH TLV	OSHA PEL	AIHA WEEL	OTHER
2-Propenoic acid, 2-methyl-, (1-methylethylidene)	None	None	None	None
3,3,5 Trimethylcyclohexyl methacrylate	None	None	None	None
2-Hydroxyethyl methacrylate	None	None	None	3 ppm Ceiling
Polyurethane methacrylate resin	None	None	None	None
Acrylic acid	2 ppm TWA (SKIN)	None	None	1 ppm TWA 3 ppm STEL (SKIN)
Hydroxyalkyl methacrylate	None	None	None	1 ppm TWA 3 ppm STEL
1-Acetyl-2-phenylhydrazine	None	None	None	None
Methacrylic acid	20 ppm TWA	None	None	None
Cumene hydroperoxide	None	None	1 ppm (6 mg/m3) TWA (SKIN)	None

Engineering controls: Provide adequate local exhaust ventilation to maintain worker exposure below

exposure limits.

Respiratory protection: Use a NIOSH approved air-purifying respirator with an organic vapor cartridge.

If this material is handled at elevated temperatures or under mist forming conditions, without engineering controls, a NIOSH approved respirator must

be used.

Eye/face protection: Safety goggles or safety glasses with side shields. Full face protection should

be used if the potential for splashing or spraying of product exists. Safety

showers and eye wash stations should be available.

Use chemical resistant, impermeable clothing including gloves and either an Skin protection:

apron or body suit to prevent skin contact. Neoprene gloves.

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical state: Liquid Color: Green Odor: Characteristic Odor threshold: Not available. pH: Not available. Vapor pressure: Not available.

Boiling point/range: Not available. Melting point/ range: Not available. Specific gravity: 1.1

Vapor density: Not available. Flash point: 93.3 °C (199.94 °F) Flammable/Explosive limits - lower: Not available. Flammable/Explosive limits - upper: Not available.

Autoignition temperature: Not available

IDH number: 1835205

Flammability:

Evaporation rate:

Solubility in water:

Partition coefficient (n-octanol/water):

VOC content:

Viscosity:

Decomposition temperature:

Not applicable

Not available.

Not available.

Not available.

Not available.

10. STABILITY AND REACTIVITY

Stability: Stable under normal conditions of storage and use.

Hazardous reactions: None under normal processing.

Hazardous decomposition

products:

Oxides of carbon. Oxides of sulfur. Oxides of nitrogen. Irritating organic vapours.

Incompatible materials: Peroxides. Free radical initiators. Alkali metals

Reactivity: Not available.

Conditions to avoid: Elevated temperatures. Heat, flames, sparks and other sources of ignition. Store away from

incompatible materials.

11. TOXICOLOGICAL INFORMATION

Relevant routes of exposure: Skin, Inhalation, Eyes, Ingestion

IDH number: 1835205 Product name: LOCTITE 680 RETAIN CMPND 10ML

Potential Health Effects/Symptoms

Inhalation: Inhalation of vapors or mists of the product may be irritating to the respiratory system. Skin contact:

Causes skin irritation. May cause allergic skin reaction.

Eye contact:

Causes serious eye damage.

May cause gastrointestinal tract irritation if swallowed. Ingestion:

Hazardous Component(s)	LD50s and LC50s	Immediate and Delayed Health Effects
2-Propenoic acid, 2-methyl-, (1-methylethylidene)	None	Irritant, Allergen
3,3,5 Trimethylcyclohexyl methacrylate	None	No Records
2-Hydroxyethyl methacrylate	Oral LD50 (Mouse) = 3,275 mg/kg Oral LD50 (Rat) = 11.2 g/kg Oral LD50 (Rat) = 5,050 mg/kg	Irritant, Allergen
Polyurethane methacrylate resin	None	Irritant, Allergen
Acrylic acid	Oral LD50 (Rat) = 33.5 mg/kg Oral LD50 (Mouse) = 2,400 mg/kg Oral LD50 (Rat) = 2.5 g/kg Oral LD50 (Rat) = 193 mg/kg Oral LD50 (Rat) = 1,250 mg/kg Inhalation LC50 (Rat, 4 h) = 1,200 mg/l	Allergen, Corrosive, Irritant, Kidney, Liver
Hydroxyalkyl methacrylate	None	Irritant, Allergen
1-Acetyl-2-phenylhydrazine	Oral LD50 (Mouse) = 270 mg/kg	Allergen, Blood, Kidney, Mutagen, Some evidence of carcinogenicity
Methacrylic acid	Oral LD50 (Mouse) = 1,332 mg/kg Oral LD50 (Mouse) = 1,600 mg/kg Oral LD50 (Mouse) = 1,250 mg/kg Oral LD50 (Rabbit) = 1,200 mg/kg Oral LD50 (Rat) = 1,060 mg/kg Oral LD50 (Rat) = 2,224 mg/kg Dermal LD50 (Rabbit) = 500 mg/kg Inhalation LC50 (Rat, 4 h) = 7.1 mg/l	Corrosive, Irritant, Allergen
Cumene hydroperoxide	Inhalation LC50 (Mouse, 4 h) = 200 mg/l	Allergen, Central nervous system, Corrosive, Irritant, Mutagen

Hazardous Component(s)	NTP Carcinogen	IARC Carcinogen	OSHA Carcinogen (Specifically Regulated)
2-Propenoic acid, 2-methyl-, (1-methylethylidene)	No	No	No
3,3,5 Trimethylcyclohexyl methacrylate	No	No	No
2-Hydroxyethyl methacrylate	No	No	No
Polyurethane methacrylate resin	No	No	No
Acrylic acid	No	No	No
Hydroxyalkyl methacrylate	No	No	No
1-Acetyl-2-phenylhydrazine	No	No	No
Methacrylic acid	No	No	No
Cumene hydroperoxide	No	No	No

12. ECOLOGICAL INFORMATION

Ecological information: Not available.

13. DISPOSAL CONSIDERATIONS

Information provided is for unused product only.

Recommended method of disposal: Follow all local, state, federal and provincial regulations for disposal.

Hazardous waste number:Not a RCRA hazardous waste.

14. TRANSPORT INFORMATION

The transport information provided in this section only applies to the material/formulation itself, and is not specific to any package/configuration.

U.S. Department of Transportation Ground (49 CFR)

Proper shipping name: RQ, Environmentally hazardous substance, liquid, n.o.s.

Hazard class or division: 9
Identification number: UN 3082

Packing group:

DOT Hazardous Substance(s): alpha,alpha-Dimethylbenzylhydroperoxide

International Air Transportation (ICAO/IATA)

Proper shipping name: RQ, Environmentally hazardous substance, liquid, n.o.s.

Hazard class or division: 9
Identification number: UN 3082
Packing group: III

Water Transportation (IMO/IMDG)

Proper shipping name: RQ, ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.

Hazard class or division: 9
Identification number: UN 3082
Packing group: III

15. REGULATORY INFORMATION

United States Regulatory Information

TSCA 8 (b) Inventory Status: All components are listed or are exempt from listing on the Toxic Substances Control Act

Inventory.

TSCA 12 (b) Export Notification: None above reporting de minimis

CERCLA/SARA Section 302 EHS: None above reporting de minimis.
CERCLA/SARA Section 311/312: Immediate Health, Delayed Health

CERCLA/SARA Section 313: This product contains the following toxic chemicals subject to the reporting requirements of

section 313 of the Emergency Planning and Community Right-To-Know Act of 1986 (40

CFR 372). Acrylic acid (CAS# 79-10-7).

CERCLA Reportable quantity: Cumene hydroperoxide (CAS# 80-15-9) 10 lbs. (4.54 kg)

California Proposition 65: This product contains a chemical known in the State of California to cause cancer. This

product contains a chemical known to the State of California to cause birth defects or other

reproductive harm.

Canada Regulatory Information

CEPA DSL/NDSL Status: One or more components are not listed on, and are not exempt from listing on either the

Domestic Substances List or the Non-Domestic Substances List.

16. OTHER INFORMATION

This safety data sheet contains changes from the previous version in sections: 2

Prepared by: Product Safety and Regulatory Affairs

Issue date: 08/17/2017

DISCLAIMER: The data contained herein are furnished for information only and are believed to be reliable. However, Henkel Corporation and its affiliates ("Henkel") does not assume responsibility for any results obtained by persons over whose methods Henkel has no control. It is the user's responsibility to determine the suitability of Henkel's products or any production methods mentioned herein for a particular purpose, and to adopt such precautions as may be advisable for the protection of property and persons against any hazards that may be involved in the handling and use of any Henkel's products. In light of the foregoing, Henkel specifically disclaims all warranties, express or implied, including warranties of merchantability and fitness for a particular purpose, arising from sale or use of Henkel's products. Henkel further disclaims any liability for consequential or incidental damages of any kind, including lost profits.

IDH number: 1835205 Product name: LOCTITE 680 RETAIN CMPND 10ML



Revision Number: 003.0 Issue date: 08/30/2017

1. PRODUCT AND COMPANY IDENTIFICATION

Product name: **LOCTITE 567 TB 50ML EN** IDH number: 2087067 Product type: Anaerobic Sealant Item number: 2087067 Restriction of Use: None identified

Company address: Henkel Corporation

Henkel Way One Rocky Hill, Connecticut 06067

Region: **United States** Contact information:

Telephone: +1 (860) 571-5100

MEDICAL EMERGENCY Phone: Poison Control Center 1-877-671-4608 (toll free) or 1-303-592-1711

TRANSPORT EMERGENCY Phone: CHEMTREC 1-800-424-9300 (toll free) or 1-703-527-3887

Internet: www.henkelna.com

2. HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW WARNING: CAUSES SKIN IRRITATION.

MAY CAUSE AN ALLERGIC SKIN REACTION.

CAUSES SERIOUS EYE IRRITATION.

HAZARD CLASS	HAZARD CATEGORY
SKIN IRRITATION	2
EYE IRRITATION	2A
SKIN SENSITIZATION	1

PICTOGRAM(S)



Precautionary Statements

Prevention: Avoid breathing vapors, mist, or spray. Wash affected area thoroughly after handling.

Contaminated work clothing should not be allowed out of the workplace. Wear protective

gloves, eye protection, and face protection.

IF ON SKIN: Wash with plenty of water. IF IN EYES: Rinse cautiously with water for several Response:

> minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If skin irritation or rash occurs: Get medical attention. If eye irritation persists: Get medical attention. Take off

contaminated clothing.

Storage: Not prescribed

Disposal: Dispose of contents and/or container according to Federal, State/Provincial and local

governmental regulations.

Classification complies with OSHA Hazard Communication Standard (29 CFR 1910.1200) and is consistent with the provisions of the United Nations Globally Harmonized System of Classification and Labeling of Chemicals (GHS).

See Section 11 for additional toxicological information.

3. COMPOSITION / INFORMATION ON INGREDIENTS

Hazardous Component(s)	CAS Number	Percentage*

3,3,5 Trimethylcyclohexyl methacrylate	7779-31-9	20 - 30
Ethene, homopolymer	9002-88-4	5 - 10
Ethene, tetrafluoro-, homopolymer	9002-84-0	5 - 10
Titanium dioxide	13463-67-7	1 - 5
Silica, amorphous, fumed, crystal-free	112945-52-5	1 - 5
Propane-1,2-diol	57-55-6	1 - 5
Cumene hydroperoxide	80-15-9	0.1 - 1
Cumene	98-82-8	0.1 - 1

^{*} Exact percentages may vary or are trade secret. Concentration range is provided to assist users in providing appropriate protections.

4. FIRST AID MEASURES

Inhalation:Not available.Skin contact:Not available.Eye contact:Not available.Ingestion:Not available.Symptoms:See Section 11.

5. FIRE FIGHTING MEASURES

Extinguishing media: Water spray (fog), foam, dry chemical or carbon dioxide.

Special firefighting procedures: Wear self-contained breathing apparatus and full protective clothing, such as

turn-out gear. In case of fire, keep containers cool with water spray.

Uncontrolled polymerization may occur at high temperatures resulting in

explosions or rupture of storage containers.

Hazardous combustion products: Oxides of carbon and nitrogen, aldehydes, acids and undetermined organics.

Toxic fluorine compounds. Ketones.

6. ACCIDENTAL RELEASE MEASURES

Use personal protection recommended in Section 8, isolate the hazard area and deny entry to unnecessary and unprotected personnel.

Environmental precautions:Do not allow product to enter sewer or waterways.

Clean-up methods: Remove all sources of ignition. Evacuate and ventilate spill area; dike spill to

prevent entry into water system; wear full protective equipment during cleanup. Soak up with inert absorbent material (e.g. sand, silica gel, acid binder, universal binder, sawdust). Scrape up as much material as possible. Store in a partly filled, closed container until disposal. Refer to Section 8 "Exposure

Controls / Personal Protection" prior to clean up.

7. HANDLING AND STORAGE

Handling: Use only with adequate ventilation. Prevent contact with eyes, skin and

clothing. Do not breathe vapor and mist. Wash thoroughly after handling.

Keep container closed. Refer to Section 8.

Storage: Keep in a cool, well ventilated area away from heat, sparks and open flame.

Keep container tightly closed until ready for use.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Employers should complete an assessment of all workplaces to determine the need for, and selection of, proper exposure controls and protective equipment for each task performed.

Hazardous Component(s)	ACGIH TLV	OSHA PEL	AIHA WEEL	OTHER
3,3,5 Trimethylcyclohexyl methacrylate	None	None	None	None
Ethene, homopolymer	10 mg/m3 TWA Inhalable particles. 3 mg/m3 TWA Respirable particles.	15 MPPCF TWA Respirable fraction. 15 mg/m3 TWA Total dust. 50 MPPCF TWA Total dust. 5 mg/m3 TWA Respirable fraction. 5 mg/m3 PEL Respirable fraction. 15 mg/m3 PEL Total dust.	None	None
Ethene, tetrafluoro-, homopolymer	None	None	None	10 mg/m3 TWA Total dust. 5 mg/m3 TWA Respirable fraction.
Titanium dioxide	10 mg/m3 TWA	15 mg/m3 PEL Total dust. 15 MPPCF TWA Respirable fraction. 15 mg/m3 TWA Total dust. 50 MPPCF TWA Total dust. 5 mg/m3 TWA Respirable fraction.	None	None
Silica, amorphous, fumed, crystal-free	10 mg/m3 TWA Inhalable dust. 3 mg/m3 TWA Respirable fraction.	20 MPPCF TWA 0.8 mg/m3 TWA	None	None
Propane-1,2-diol	None	None	10 mg/m3 TWA Aerosol.	None
Cumene hydroperoxide	None	None	1 ppm (6 mg/m3) TWA (SKIN)	None
Cumene	50 ppm TWA	50 ppm (245 mg/m3) PEL (SKIN)	None	None

Engineering controls: Provide adequate local exhaust ventilation to maintain worker exposure below

exposure limits.

Respiratory protection: Use NIOSH approved respirator if there is potential to exceed exposure

limit(s).

Eye/face protection: Safety goggles or safety glasses with side shields. Full face protection should

be used if the potential for splashing or spraying of product exists. Safety

showers and eye wash stations should be available.

Skin protection: Use chemical resistant, impermeable clothing including gloves and either an

apron or body suit to prevent skin contact. Neoprene gloves.

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical state: Paste, Liquid
Color: Off white
Odor: Mild

Odor threshold:

pH:

Not available.

Not available.

Vapor pressure:

Not available.

Boiling point/range: > 149 °C (> 300.2 °F)no method

Melting point/ range: Not available.

Specific gravity: 1.15

Vapor density: Not available. Flash point: > 93 °C (> 199.4 °F) Flammable/Explosive limits - lower: Not available. Flammable/Explosive limits - upper: Not available. Autoignition temperature: Not available. Flammability: Not applicable **Evaporation rate:** Not available. Solubility in water: Not available. Partition coefficient (n-octanol/water): Not available.

VOC content: 0.13 % (ASTM D5403)

Viscosity: Not available.

Decomposition temperature: Not available.

10. STABILITY AND REACTIVITY

Stability: Stable under normal conditions of storage and use.

Hazardous reactions: None under normal processing. Polymerization may occur at elevated temperature or in the

presence of incompatible materials.

Hazardous decomposition

products:

Oxides of carbon and nitrogen, aldehydes, acids and undetermined organics. Toxic fluorine

compounds. Ketones.

Incompatible materials: Strong oxidizing agents. Strong reducing agents. Free radical initiators. Inert gases. Oxygen

scavengers.

Reactivity: Not available.

Conditions to avoid: Elevated temperatures. Heat, flames, sparks and other sources of ignition. Store away from

incompatible materials.

11. TOXICOLOGICAL INFORMATION

Relevant routes of exposure: Skin, Inhalation, Eyes, Ingestion

Potential Health Effects/Symptoms

Inhalation: Inhalation of vapors or mists of the product may be irritating to the respiratory system.

Skin contact: Causes skin irritation. May cause allergic skin reaction.

Eve contact: Causes serious eve irritation.

Ingestion: May cause gastrointestinal tract irritation if swallowed.

Hazardous Component(s)	LD50s and LC50s	Immediate and Delayed Health Effects
3,3,5 Trimethylcyclohexyl methacrylate	None	No Records
Ethene, homopolymer	None	No Target Organs
Ethene, tetrafluoro-, homopolymer	None	No Target Organs
Titanium dioxide	None	Irritant, Respiratory, Some evidence of carcinogenicity
Silica, amorphous, fumed, crystal-free	None	Nuisance dust
Propane-1,2-diol	Oral LD50 (Rabbit) = 18 g/kg Oral LD50 (Mouse) = 23.9 g/kg Oral LD50 (Rat) = 30 g/kg	Irritant
Cumene hydroperoxide	Inhalation LC50 (Mouse, 4 h) = 200 mg/l	Allergen, Central nervous system, Corrosive, Irritant, Mutagen
Cumene	Oral LD50 (Rat) = 2.91 g/kg Oral LD50 (Rat) = 1,400 mg/kg Inhalation LC50 (Rat, 4 h) = 8000 ppm	Central nervous system, Irritant, Lung

Hazardous Component(s)	NTP Carcinogen	IARC Carcinogen	OSHA Carcinogen (Specifically Regulated)
3,3,5 Trimethylcyclohexyl methacrylate	No	No	No
Ethene, homopolymer	No	No	No
Ethene, tetrafluoro-, homopolymer	No	No	No
Titanium dioxide	No	Group 2B	No
Silica, amorphous, fumed, crystal-free	No	No	No
Propane-1,2-diol	No	No	No
Cumene hydroperoxide	No	No	No
Cumene	Reasonably Anticipated to be a Human Carcinogen.	Group 2B	No

12. ECOLOGICAL INFORMATION

Ecological information: Not available.

13. DISPOSAL CONSIDERATIONS

Information provided is for unused product only.

Recommended method of disposal: Follow all local, state, federal and provincial regulations for disposal.

Hazardous waste number:Not a RCRA hazardous waste.

14. TRANSPORT INFORMATION

The transport information provided in this section only applies to the material/formulation itself, and is not specific to any package/configuration.

U.S. Department of Transportation Ground (49 CFR)

Proper shipping name: RQ, Environmentally hazardous substance, liquid, n.o.s.

Hazard class or division: 9
Identification number: UN 3082
Packing group: III

DOT Hazardous Substance(s): alpha,alpha-Dimethylbenzylhydroperoxide

International Air Transportation (ICAO/IATA)

Proper shipping name: RQ, Environmentally hazardous substance, liquid, n.o.s.

Hazard class or division:

Identification number: UN 3082 Packing group: Ш

Water Transportation (IMO/IMDG)

Proper shipping name: RQ, ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.

Hazard class or division: UN 3082 Identification number: Ш

Packing group:

15. REGULATORY INFORMATION

United States Regulatory Information

TSCA 8 (b) Inventory Status: All components are listed or are exempt from listing on the Toxic Substances Control Act

Inventory.

TSCA 12 (b) Export Notification: Ethene, tetrafluoro-, homopolymer (CAS# 9002-84-0).

CERCLA/SARA Section 302 EHS: None above reporting de minimis. CERCLA/SARA Section 311/312: Immediate Health, Delayed Health CERCLA/SARA Section 313: None above reporting de minimis.

CERCLA Reportable quantity: Cumene hydroperoxide (CAS# 80-15-9) 10 lbs. (4.54 kg)

California Proposition 65: This product contains a chemical known in the State of California to cause cancer. This

product contains a chemical known to the State of California to cause birth defects or other

reproductive harm.

Canada Regulatory Information

CEPA DSL/NDSL Status: One or more components are not listed on, and are not exempt from listing on either the

Domestic Substances List or the Non-Domestic Substances List.

16. OTHER INFORMATION

This safety data sheet contains changes from the previous version in sections: 2

Prepared by: Sheila Gines, Regulatory Affairs Specialist

Issue date: 08/30/2017

DISCLAIMER: The data contained herein are furnished for information only and are believed to be reliable. However, Henkel Corporation and its affiliates ("Henkel") does not assume responsibility for any results obtained by persons over whose methods Henkel has no control. It is the user's responsibility to determine the suitability of Henkel's products or any production methods mentioned herein for a particular purpose, and to adopt such precautions as may be advisable for the protection of property and persons against any hazards that may be involved in the handling and use of any Henkel's products. In light of the foregoing, Henkel specifically disclaims all warranties, express or implied, including warranties of merchantability and fitness for a particular purpose, arising from sale or use of Henkel's products. Henkel further disclaims any liability for consequential or incidental damages of any kind, including lost profits.

IDH number: 2087067 Product name: LOCTITE 567 TB 50ML EN



Revision Number: 008.0 Issue date: 08/21/2017

1. PRODUCT AND COMPANY IDENTIFICATION

Product name: LOCTITE SI 587 HIGH PERFORM RTV IDH number: 135504

SILICONE known as Loctite(R) 587

Blue High Perfo

Product type:Silicone SealantItem number:58730Restriction of Use:None identifiedRegion:United States

Company address: Contact information:
Henkel Corporation Telephone: +1 (860) 5

Henkel Corporation Telephone: +1 (860) 571-5100
Henkel Way One MEDICAL EMERGENCY Phone: Poison Control Center

Rocky Hill, Connecticut 06067

1-877-671-4608 (toll free) or 1-303-592-1711
TRANSPORT EMERGENCY Phone: CHEMTREC
1-800-424-9300 (toll free) or 1-703-527-3887

Internet: www.henkelna.com

2. HAZARDS IDENTIFICATION

WARNING: MAY CAUSE AN ALLERGIC SKIN REACTION.
CAUSES SERIOUS EYE IRRITATION.

HAZARD CLASS	HAZARD CATEGORY
EYE IRRITATION	2A
SKIN SENSITIZATION	1

PICTOGRAM(S)



Precautionary Statements

Prevention: Avoid breathing dust or fumes. Wash affected area thoroughly after handling. Contaminated

work clothing should not be allowed out of the workplace. Wear protective gloves, eye

protection, and face protection.

Response: IF ON SKIN: Wash with plenty of water. IF IN EYES: Rinse cautiously with water for several

minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If skin irritation or rash occurs: Get medical attention. If eye irritation persists: Get medical attention. Wash

contaminated clothing before reuse.

Storage: Not prescribed

Disposal: Dispose of contents and/or container according to Federal, State/Provincial and local

governmental regulations.

Classification complies with OSHA Hazard Communication Standard (29 CFR 1910.1200) and is consistent with the provisions of the United Nations Globally Harmonized System of Classification and Labeling of Chemicals (GHS).

See Section 11 for additional toxicological information.

3. COMPOSITION / INFORMATION ON INGREDIENTS

Hazardous Component(s)	CAS Number	Percentage*
------------------------	------------	-------------

IDH number: 135504 Product name: LOCTITE SI 587 HIGH PERFORM RTV SILICONE known as Loctite(R) 587 Blue High

Limestone	1317-65-3	30 - 40
Amorphous fumed silica	68611-44-9	5 - 10
Butan-2-one O,O',O"- (vinylsilylidyne)trioxime	2224-33-1	1 - 5
Quartz (SiO2)	14808-60-7	0.1 - 1

^{*} Exact percentages may vary or are trade secret. Concentration range is provided to assist users in providing appropriate protections.

4. FIRST AID MEASURES

Inhalation: Move to fresh air in case of accidental inhalation of vapours or decomposition

products. If symptoms develop and persist, get medical attention.

Skin contact: Wipe off paste with paper towel or cloth. Wash with soap and water. If skin

irritation persists, call a physician.

Eye contact: Rinse immediately with plenty of water, also under the eyelids, for at least 15

minutes. If adverse health effects develop seek medical attention.

Ingestion: Do not induce vomiting. In case of adverse health effects seek medical advice.

Symptoms: See Section 11.

5. FIRE FIGHTING MEASURES

Extinguishing media: Foam, dry chemical or carbon dioxide.

Special firefighting procedures: Prevent inhalation of fumes and gases. Wear self-contained breathing

apparatus.

Unusual fire or explosion hazards: Not available.

IDH number: 135504

Hazardous combustion products: Oxides of carbon. Oxides of silicon. Formaldehyde. Irritating organic vapours.

6. ACCIDENTAL RELEASE MEASURES

Use personal protection recommended in Section 8, isolate the hazard area and deny entry to unnecessary and unprotected personnel.

Environmental precautions: Do not allow product to enter sewer or waterways.

Clean-up methods: Scrape up as much material as possible. Maintain good ventilation for large

spills. Place scrap material in a well ventilated area and allow to cure to

rubber.

7. HANDLING AND STORAGE

Handling: Prevent contact with eyes, skin and clothing. Do not breathe vapor and mist.

Wash thoroughly after handling. Do not handle contact lenses until all sealant has been removed from hands. Residual sealant may transfer to lenses and

cause eye irritation.

Storage: For safe storage, store at or below 32 °C (89.6 °F)

Keep container closed.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Employers should complete an assessment of all workplaces to determine the need for, and selection of, proper exposure controls and protective equipment for each task performed.

Hazardous Component(s)	ACGIH TLV	OSHA PEL	AIHA WEEL	OTHER
Limestone	10 mg/m3 TWA Total dust.	5 mg/m3 PEL Respirable fraction. 15 mg/m3 PEL Total dust.	None	None
Amorphous fumed silica	None	0.8 mg/m3 TWA 20 MPPCF TWA	None	None
Butan-2-one O,O',O"- (vinylsilylidyne)trioxime	None	None	None	None
Quartz (SiO2)	0.025 mg/m3 TWA Respirable fraction.	2.4 MPPCF TWA Respirable. 0.1 mg/m3 TWA Respirable. 0.05 mg/m3 TWA (Respirable dust.) (Respirable dust.) 0.025 mg/m3 OSHA_ACT (Respirable dust.) 0.05 mg/m3 PEL Respirable dust.	None	None

Engineering controls: Provide adequate local exhaust ventilation to maintain worker exposure below

exposure limits.

Respiratory protection: Use a NIOSH approved air-purifying respirator if the potential to exceed

established exposure limits exists.

Eye/face protection: Safety goggles or safety glasses with side shields. Safety showers and eye

wash stations should be available.

Skin protection: Use impermeable gloves and protective clothing as necessary to prevent skin

contact.

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical state: Paste Color: Blue

Odor: Mild, Petroleum
Odor threshold: Not available.
pH: Not applicable

Vapor pressure: < 5 mm hg (20 °C (68°F))

Boiling point/range:

Melting point/ range:

Specific gravity:

Vapor density:

Not available.

1.31 at 20 °C (68°F)

Not available.

Flash point: > 93 °C (> 199.4 °F) Tagliabue closed cup

Flammable/Explosive limits - lower:
Flammable/Explosive limits - upper:
Autoignition temperature:
Flammability:
Flammability:
Evaporation rate:

Not available.
Not applicable
Not available.

Solubility in water: Polymerises in presence of water.

Partition coefficient (n-octanol/water):

VOC content:

Viscosity:

Decomposition temperature:

Not available.

Not available.

Not available.

IDH number: 135504 Product name: LOCTITE SI 587 HIGH PERFORM RTV SILICONE known as Loctite(R) 587 Blue High

10. STABILITY AND REACTIVITY

Stability: Stable at normal conditions.

Hazardous reactions: None under normal processing.

Hazardous decomposition

products:

IDH number: 135504

Oxides of carbon. Oxides of silicon. Methyl ethyl ketoxime formed during cure. Formaldehyde.

Incompatible materials: Oxidizing agents. Acids and bases.

Reactivity: Not available.

Conditions to avoid: Exposure to moisture.

11. TOXICOLOGICAL INFORMATION

Relevant routes of exposure: Skin, Inhalation, Eyes, Ingestion

Potential Health Effects/Symptoms

Inhalation: May cause respiratory tract irritation. When heated to temperatures exceeding 300° F (150° C)

in the presence of air, silicones may form formaldehyde vapors. Formaldehyde is a potential cancer hazard and a known skin and respiratory sensitizer. Vapors irritate the eyes, nose and throat. Safe handling conditions may be maintained by keeping formaldehyde vapor concentrations below the OSHA permissible limit. Abrasion of cured material such as by

sanding or grinding could release respirable particles of silica quartz, a cancer hazard by inhalation. Normal use of this product causes no such release.

Skin contact: May cause skin irritation. May cause allergic skin reaction.

Eye contact: Causes serious eye irritation.

Ingestion: Not expected under normal conditions of use. Ingestion may cause gastrointestinal irritation,

nausea, vomiting and diarrhea.

Hazardous Component(s)	LD50s and LC50s	Immediate and Delayed Health Effects
Limestone	None	Nuisance dust
Amorphous fumed silica	None	No Target Organs
Butan-2-one O,O',O"- (vinylsilylidyne)trioxime	None	Irritant, Allergen
Quartz (SiO2)	None	Immune system, Lung, Some evidence of carcinogenicity

Hazardous Component(s)	NTP Carcinogen	IARC Carcinogen	OSHA Carcinogen (Specifically Regulated)
Limestone	No	No	No
Amorphous fumed silica	No	No	No
Butan-2-one O,O',O"- (vinylsilylidyne)trioxime	No	No	No
Quartz (SiO2)	Known To Be Human Carcinogen.	Group 1	Yes

12. ECOLOGICAL INFORMATION

Ecological information: Not available.

13. DISPOSAL CONSIDERATIONS

Information provided is for unused product only.

Recommended method of disposal: Cured rubber can be incinerated or landfilled following EPA and local

regulations. Follow all local, state, federal and provincial regulations for

disposal.

Hazardous waste number:Not a RCRA hazardous waste.

14. TRANSPORT INFORMATION

The transport information provided in this section only applies to the material/formulation itself, and is not specific to any package/configuration.

U.S. Department of Transportation Ground (49 CFR)

Proper shipping name: Not regulated Hazard class or division: None

Identification number:NonePacking group:None

International Air Transportation (ICAO/IATA)

Proper shipping name: Not regulated Hazard class or division: None Identification number: None

Packing group: None

Water Transportation (IMO/IMDG)

Proper shipping name: Not regulated Hazard class or division: None Identification number: None

Packing group: None Exceptions: None

15. REGULATORY INFORMATION

United States Regulatory Information

TSCA 8 (b) Inventory Status: All components are listed or are exempt from listing on the Toxic Substances Control Act

Inventory.

TSCA 12 (b) Export Notification: None above reporting de minimis

CERCLA/SARA Section 302 EHS:
CERCLA/SARA Section 311/312:
CERCLA/SARA Section 313:

None above reporting de minimis.
None above reporting de minimis.

California Proposition 65: This product contains a chemical known in the State of California to cause cancer. This

product contains a chemical known to the State of California to cause birth defects or other

reproductive harm.

Canada Regulatory Information

CEPA DSL/NDSL Status: All components are listed on or are exempt from listing on the Canadian Domestic

Substances List.

16. OTHER INFORMATION

This safety data sheet contains changes from the previous version in sections: 2, 3, 8, 11

Prepared by: Product Safety and Regulatory Affairs

Issue date: 08/21/2017

IDH number: 135504 Product name: LOCTITE SI 587 HIGH PERFORM RTV SILICONE known as Loctite(R) 587 Blue High

DISCLAIMER: The data contained herein are furnished for information only and are believed to be reliable. However, Henkel Corporation and its affiliates ("Henkel") does not assume responsibility for any results obtained by persons over whose methods Henkel has no control. It is the user's responsibility to determine the suitability of Henkel's products or any production methods mentioned herein for a particular purpose, and to adopt such precautions as may be advisable for the protection of property and persons against any hazards that may be involved in the handling and use of any Henkel's products. In light of the foregoing, Henkel specifically disclaims all warranties, express or implied, including warranties of merchantability and fitness for a particular purpose, arising from sale or use of Henkel's products. Henkel further disclaims any liability for consequential or incidental damages of any kind, including lost profits.

IDH number: 135504



Revision Number: 002.0 Issue date: 04/03/2018

1. PRODUCT AND COMPANY IDENTIFICATION

Product name: LOCTITE 518 IND 50ML IDH number: 2096064 Product type: Anaerobic Adhesive Item number: 2096064 Restriction of Use: None identified Region: **United States**

Company address: Henkel Corporation

Henkel Way One

Rocky Hill, Connecticut 06067

Contact information: Telephone: +1 (860) 571-5100

MEDICAL EMERGENCY Phone: Poison Control Center 1-877-671-4608 (toll free) or 1-303-592-1711 TRANSPORT EMERGENCY Phone: CHEMTREC 1-800-424-9300 (toll free) or 1-703-527-3887

Internet: www.henkelna.com

2. HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW

WARNING: CAUSES SKIN IRRITATION.

> MAY CAUSE AN ALLERGIC SKIN REACTION. CAUSES SERIOUS EYE IRRITATION.

SUSPECTED OF CAUSING CANCER.

HAZARD CLASS	HAZARD CATEGORY
SKIN IRRITATION	2
EYE IRRITATION	2A
SKIN SENSITIZATION	1
CARCINOGENICITY	2





Precautionary Statements

Prevention: Obtain special instructions before use. Do not handle until all safety precautions have been

read and understood. Avoid breathing vapors, mist, or spray. Wash affected area thoroughly after handling. Contaminated work clothing should not be allowed out of the workplace. Wear

protective gloves, clothing, eye and face protection.

Response: IF ON SKIN: Wash with plenty of water. IF IN EYES: Rinse cautiously with water for several

minutes. Remove contact lenses, if present and easy to do. Continue rinsing. IF exposed or concerned: Get medical attention. If skin irritation or rash occurs: Get medical attention. If eye

irritation persists: Get medical attention. Take off contaminated clothing.

Storage: Store locked up.

Disposal: Dispose of contents and/or container according to Federal, State/Provincial and local

governmental regulations.

Classification complies with OSHA Hazard Communication Standard (29 CFR 1910.1200) and is consistent with the provisions of the United Nations Globally Harmonized System of Classification and Labeling of Chemicals (GHS).

See Section 11 for additional toxicological information.

3. COMPOSITION / INFORMATION ON INGREDIENTS

Hazardous Component(s)	CAS Number	Percentage*
Polyurethane methacrylate resin	Unknown	50 - 60
2-Hydroxy-3-phenoxypropyl methacrylate	16926-87-7	10 - 20
3,3,5 Trimethylcyclohexyl methacrylate	7779-31-9	10 - 20
2-Hydroxyethyl methacrylate	868-77-9	5 - 10
Silica, amorphous, fumed, crystal-free	112945-52-5	5 - 10
Saccharin	81-07-2	1 - 5
3-[2- (Methacryloyloxy)ethoxycarbonyl]propioni c acid	20882-04-6	0.1 - 1
1-Acetyl-2-phenylhydrazine	114-83-0	0.1 - 1
Acrylic acid oligomers	Unknown	0.1 - 1
Methacrylic acid	79-41-4	0.1 - 1
Acrylic acid	79-10-7	0.1 - 1
D-Limonene	5989-27-5	0.1 - 1

^{*} Exact percentages may vary or are trade secret. Concentration range is provided to assist users in providing appropriate protections.

4. FIRST AID MEASURES

Inhalation: Move to fresh air. If not breathing, give artificial respiration. If breathing is

difficult, give oxygen. Get medical attention.

Skin contact: Immediately flush skin with plenty of water (using soap, if available). Remove

contaminated clothing and footwear. Wash clothing before reuse. Get medical

attention.

Eye contact: Rinse immediately with plenty of water, also under the eyelids, for at least 15

minutes. Get medical attention.

Ingestion: DO NOT induce vomiting unless directed to do so by medical personnel.

Never give anything by mouth to an unconscious person. Get medical

attention.

Symptoms: See Section 11.

5. FIRE FIGHTING MEASURES

Extinguishing media: Water spray (fog), foam, dry chemical or carbon dioxide.

Special firefighting procedures: Wear self-contained breathing apparatus and full protective clothing, such as

turn-out gear. In case of fire, keep containers cool with water spray.

Unusual fire or explosion hazards: Uncontrolled polymerization may occur at high temperatures resulting in

explosions or rupture of storage containers.

Hazardous combustion products: Oxides of carbon. Irritating organic vapours.

6. ACCIDENTAL RELEASE MEASURES

Use personal protection recommended in Section 8, isolate the hazard area and deny entry to unnecessary and unprotected personnel.

Environmental precautions: Do not allow product to enter sewer or waterways.

Clean-up methods:

Remove all sources of ignition. Evacuate and ventilate spill area; dike spill to prevent entry into water system; wear full protective equipment during clean-up. Soak up with inert absorbent material (e.g. sand, silica gel, acid binder, universal binder, sawdust). Scrape up as much material as possible. Store in a partly filled, closed container until disposal. Refer to Section 8 "Exposure Controls / Personal Protection" prior to clean up.

7. HANDLING AND STORAGE

Handling: Use only with adequate ventilation. Prevent contact with eyes, skin and

clothing. Do not breathe vapor and mist. Wash thoroughly after handling.

Keep container closed. Refer to Section 8.

Storage: Keep in a cool, well ventilated area away from heat, sparks and open flame.

Keep container tightly closed until ready for use.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Employers should complete an assessment of all workplaces to determine the need for, and selection of, proper exposure controls and protective equipment for each task performed.

Hazardous Component(s)	ACGIH TLV	OSHA PEL	AIHA WEEL	OTHER
Polyurethane methacrylate resin	None	None	None	None
2-Hydroxy-3-phenoxypropyl methacrylate	None	None	None	None
3,3,5 Trimethylcyclohexyl methacrylate	None	None	None	None
2-Hydroxyethyl methacrylate	None	None	None	3 ppm Ceiling
Silica, amorphous, fumed, crystal-free	10 mg/m3 TWA Inhalable dust. 3 mg/m3 TWA Respirable fraction.	20 MPPCF TWA 0.8 mg/m3 TWA	None	None
Saccharin	None	None	None	None
3-[2- (Methacryloyloxy)ethoxycarbonyl]propioni c acid	None	None	None	None
1-Acetyl-2-phenylhydrazine	None	None	None	None
Acrylic acid oligomers	None	None	None	None
Methacrylic acid	20 ppm TWA	None	None	None
Acrylic acid	2 ppm TWA (SKIN)	None	None	1 ppm TWA 3 ppm STEL (SKIN)
D-Limonene	None	None	30 ppm (165.5 mg/m3) TWA	None

Engineering controls: Provide adequate local exhaust ventilation to maintain worker exposure below

exposure limits.

Respiratory protection: Use NIOSH approved respirator if there is potential to exceed exposure

limit(s).

Eye/face protection: Safety goggles or safety glasses with side shields. Full face protection should

be used if the potential for splashing or spraying of product exists. Safety

showers and eye wash stations should be available.

Skin protection:Use chemical resistant, impermeable clothing including gloves and either an

apron or body suit to prevent skin contact. Neoprene gloves.

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical state: Liquid, gel-like Color: Red

Odor: Mild
Odor threshold: Not available.
pH: Not available.

IDH number: 2096064 Product name: LOCTITE 518 IND 50ML

Vapor pressure: Not available. Boiling point/range: Not available. Melting point/ range: Specific gravity: Not available.

Vapor density: Not available.

Flash point: > 100 °C (> 212°F) no method

Flammable/Explosive limits - lower: Not available. Flammable/Explosive limits - upper: Not available. Autoignition temperature: Not available. Flammability: Not applicable **Evaporation rate:** Not available. Solubility in water: Not available. Partition coefficient (n-octanol/water): Not available. VOC content: Not available. Viscosity: Not available. **Decomposition temperature:** Not available.

10. STABILITY AND REACTIVITY

Stability: Stable under normal conditions of storage and use.

Hazardous reactions: None under normal processing. Polymerization may occur at elevated temperature or in the

presence of incompatible materials.

Hazardous decomposition

products:

Oxides of carbon. Irritating organic vapours.

Strong oxidizing agents. Strong reducing agents. Free radical initiators. Acids and bases. Inert Incompatible materials:

gases. Oxygen scavengers. Amines.

Reactivity: Not available.

Conditions to avoid: Elevated temperatures. Heat, flames, sparks and other sources of ignition. Store away from

incompatible materials.

11. TOXICOLOGICAL INFORMATION

Relevant routes of exposure: Skin, Inhalation, Eyes, Ingestion

IDH number: 2096064 Product name: LOCTITE 518 IND 50ML

Potential Health Effects/Symptoms

Inhalation of vapors or mists of the product may be irritating to the respiratory system. Causes skin irritation. May cause allergic skin reaction. Inhalation:

Skin contact:

Causes serious eye irritation. Eye contact:

Ingestion: May cause gastrointestinal tract irritation if swallowed.

None		
	Irritant, Allergen	
None	Irritant, Allergen	
None	No Records	
Oral LD50 (Mouse) = 3,275 mg/kg Oral LD50 (Rat) = 11.2 g/kg Oral LD50 (Rat) = 5,050 mg/kg	Irritant, Allergen	
None	Nuisance dust	
Oral LD50 (Mouse) = 17 g/kg	No Target Organs	
None	No Records	
Oral LD50 (Mouse) = 270 mg/kg	Allergen, Blood, Kidney, Mutagen, Some evidence of carcinogenicity	
None	Irritant, Allergen	
Oral LD50 (Mouse) = 1,332 mg/kg Oral LD50 (Mouse) = 1,600 mg/kg Oral LD50 (Mouse) = 1,250 mg/kg Oral LD50 (Rabbit) = 1,200 mg/kg Oral LD50 (Rat) = 1,060 mg/kg Oral LD50 (Rat) = 2,224 mg/kg Dermal LD50 (Rabbit) = 500 mg/kg Inhalation LC50 (Rat, 4 h) = 7.1 mg/l	Corrosive, Irritant, Allergen	
Oral LD50 (Rat) = 33.5 mg/kg Oral LD50 (Mouse) = 2,400 mg/kg Oral LD50 (Rat) = 2.5 g/kg Oral LD50 (Rat) = 193 mg/kg Oral LD50 (Rat) = 1,250 mg/kg Inhalation LC50 (Rat, 4 h) = 1,200 mg/l	Allergen, Corrosive, Irritant, Kidney, Liver	
	None Oral LD50 (Mouse) = 3,275 mg/kg Oral LD50 (Rat) = 11.2 g/kg Oral LD50 (Rat) = 5,050 mg/kg None Oral LD50 (Mouse) = 17 g/kg None Oral LD50 (Mouse) = 270 mg/kg None Oral LD50 (Mouse) = 1,332 mg/kg Oral LD50 (Mouse) = 1,600 mg/kg Oral LD50 (Mouse) = 1,250 mg/kg Oral LD50 (Rabbit) = 1,200 mg/kg Oral LD50 (Rat) = 1,060 mg/kg Oral LD50 (Rat) = 2,224 mg/kg Oral LD50 (Rat) = 2,224 mg/kg Dermal LD50 (Rat) = 500 mg/kg Inhalation LC50 (Rat, 4 h) = 7.1 mg/l Oral LD50 (Mouse) = 2,400 mg/kg Oral LD50 (Rat) = 2.5 g/kg Oral LD50 (Rat) = 193 mg/kg Oral LD50 (Rat) = 193 mg/kg Oral LD50 (Rat) = 1,250 mg/kg	

Hazardous Component(s)	NTP Carcinogen	IARC Carcinogen	OSHA Carcinogen (Specifically Regulated)
Polyurethane methacrylate resin	No	No	No
2-Hydroxy-3-phenoxypropyl methacrylate	No	No	No
3,3,5 Trimethylcyclohexyl methacrylate	No	No	No
2-Hydroxyethyl methacrylate	No	No	No
Silica, amorphous, fumed, crystal-free	No	No	No
Saccharin	No	No	No
3-[2- (Methacryloyloxy)ethoxycarbonyl]propioni c acid	No	No	No
1-Acetyl-2-phenylhydrazine	No	No	No
Acrylic acid oligomers	No	No	No
Methacrylic acid	No	No	No
Acrylic acid	No	No	No
D-Limonene	No	No	No

12. ECOLOGICAL INFORMATION

Ecological information: Not available.

Product name: LOCTITE 518 IND 50ML IDH number: 2096064

13. DISPOSAL CONSIDERATIONS

Information provided is for unused product only.

Recommended method of disposal: Follow all local, state, federal and provincial regulations for disposal.

Hazardous waste number: Not a RCRA hazardous waste.

14. TRANSPORT INFORMATION

The transport information provided in this section only applies to the material/formulation itself, and is not specific to any package/configuration.

U.S. Department of Transportation Ground (49 CFR)

Proper shipping name: Not regulated Hazard class or division: None Identification number: None Packing group: None

International Air Transportation (ICAO/IATA)

Proper shipping name: Not regulated Hazard class or division: None Identification number: None Packing group: None

Water Transportation (IMO/IMDG)

Proper shipping name: Not regulated Hazard class or division: None Identification number: None Packing group: None

15. REGULATORY INFORMATION

United States Regulatory Information

TSCA 8 (b) Inventory Status: All components are listed or are exempt from listing on the Toxic Substances Control Act

Inventory.

TSCA 12 (b) Export Notification: None above reporting de minimis

CERCLA/SARA Section 302 EHS: None above reporting de minimis. CERCLA/SARA Section 311/312: Immediate Health, Delayed Health CERCLA/SARA Section 313:

This product contains the following toxic chemicals subject to the reporting requirements of section 313 of the Emergency Planning and Community Right-To-Know Act of 1986 (40

CFR 372). Saccharin (CAS# 81-07-2).

California Proposition 65: This product contains a chemical known in the State of California to cause cancer.

Canada Regulatory Information

CEPA DSL/NDSL Status: Contains one or more components listed on the Non-Domestic Substances List. All other

components are listed on or are exempt from listing on the Domestic Substances List. Components listed on the NDSL must be tracked by all Canadian Importers of Record as required by Environment Canada. They may be imported into Canada in limited quantities.

Please contact Regulatory Affairs for additional details.

16. OTHER INFORMATION

This safety data sheet contains changes from the previous version in sections: 2

Prepared by: Product Safety and Regulatory Affairs

Issue date: 04/03/2018 **DISCLAIMER:** The data contained herein are furnished for information only and are believed to be reliable. However, Henkel Corporation and its affiliates ("Henkel") does not assume responsibility for any results obtained by persons over whose methods Henkel has no control. It is the user's responsibility to determine the suitability of Henkel's products or any production methods mentioned herein for a particular purpose, and to adopt such precautions as may be advisable for the protection of property and persons against any hazards that may be involved in the handling and use of any Henkel's products. In light of the foregoing, Henkel specifically disclaims all warranties, express or implied, including warranties of merchantability and fitness for a particular purpose, arising from sale or use of Henkel's products. Henkel further disclaims any liability for consequential or incidental damages of any kind, including lost profits.

IDH number: 2096064 Product name: LOCTITE 518 IND 50ML



Revision Number: 007.0 Issue date: 10/05/2017

1. PRODUCT AND COMPANY IDENTIFICATION

Product name: LOCTITE 243 THREADLOCKER 50ML IDH number: 1329467 Product type: Threadlocker Item number: 1329467 Region: **United States**

Restriction of Use: None identified Company address:

Henkel Corporation Henkel Way One

Rocky Hill, Connecticut 06067

Contact information: Telephone: +1 (860) 571-5100 MEDICAL EMERGENCY Phone: Poison Control Center

1-877-671-4608 (toll free) or 1-303-592-1711 TRANSPORT EMERGENCY Phone: CHEMTREC 1-800-424-9300 (toll free) or 1-703-527-3887

Internet: www.henkelna.com

2. HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW

WARNING: CAUSES SKIN IRRITATION.

MAY CAUSE AN ALLERGIC SKIN REACTION.

CAUSES SERIOUS EYE IRRITATION. SUSPECTED OF CAUSING CANCER.

HAZARD CLASS	HAZARD CATEGORY
SKIN IRRITATION	2
EYE IRRITATION	2A
SKIN SENSITIZATION	1
CARCINOGENICITY	2





Precautionary Statements

Prevention: Obtain special instructions before use. Do not handle until all safety precautions have been

read and understood. Avoid breathing vapors, mist, or spray. Wash affected area thoroughly after handling. Contaminated work clothing should not be allowed out of the workplace. Wear

protective gloves, clothing, eye and face protection.

Response: IF ON SKIN: Wash with plenty of water. IF IN EYES: Rinse cautiously with water for several

minutes. Remove contact lenses, if present and easy to do. Continue rinsing. IF exposed or concerned: Get medical attention. If skin irritation or rash occurs: Get medical attention. If eye

irritation persists: Get medical attention. Take off contaminated clothing.

Storage: Store locked up.

Disposal: Dispose of contents and/or container according to Federal, State/Provincial and local

governmental regulations.

Classification complies with OSHA Hazard Communication Standard (29 CFR 1910.1200) and is consistent with the provisions of the United Nations Globally Harmonized System of Classification and Labeling of Chemicals (GHS).

See Section 11 for additional toxicological information.

3. COMPOSITION / INFORMATION ON INGREDIENTS

Hazardous Component(s)	CAS Number	Percentage*	
Tetramethylene dimethacrylate	2082-81-7	20 - 30	
Amorphous fumed silica	68611-44-9	1 - 5	
Ethene, homopolymer	9002-88-4	1 - 5	
Propane-1,2-diol	57-55-6	1 - 5	
Cumene hydroperoxide	80-15-9	0.1 - 1	
1-Acetyl-2-phenylhydrazine	114-83-0	0.1 - 1	
Cumene	98-82-8	0.1 - 1	

^{*} Exact percentages may vary or are trade secret. Concentration range is provided to assist users in providing appropriate protections

4. FIRST AID MEASURES

Inhalation: Move to fresh air. If breathing is difficult, give oxygen. If not breathing, give

artificial respiration. Get medical attention.

Skin contact: Remove contaminated clothing and footwear. Immediately flush skin with

plenty of water (using soap, if available). Wash clothing before reuse. Get

medical attention.

Eye contact: Rinse immediately with plenty of water, also under the eyelids, for at least 15

minutes. Get medical attention.

Ingestion: DO NOT induce vomiting unless directed to do so by medical personnel.

Never give anything by mouth to an unconscious person. Get medical

attention.

Symptoms: See Section 11.

5. FIRE FIGHTING MEASURES

Extinguishing media: Water spray (fog), foam, dry chemical or carbon dioxide.

Special firefighting procedures: Wear self-contained breathing apparatus and full protective clothing, such as

turn-out gear. In case of fire, keep containers cool with water spray.

Uncontrolled polymerization may occur at high temperatures resulting in

explosions or rupture of storage containers.

Hazardous combustion products: Oxides of carbon. Oxides of sulfur. Oxides of nitrogen. Irritating organic

fragments.

6. ACCIDENTAL RELEASE MEASURES

Use personal protection recommended in Section 8, isolate the hazard area and deny entry to unnecessary and unprotected personnel.

Environmental precautions: Do not allow product to enter sewer or waterways.

Clean-up methods: Remove all sources of ignition. Evacuate and ventilate spill area; dike spill to

prevent entry into water system; wear full protective equipment during cleanup. Refer to Section 8 "Exposure Controls / Personal Protection" prior to clean up. Soak up with inert absorbent material (e.g. sand, silica gel, acid binder, universal binder, sawdust). Store in a partly filled, closed container until

disposal.

7. HANDLING AND STORAGE

Handling: Prevent contact with eyes, skin and clothing. Do not breathe vapor and mist.

Wash thoroughly after handling. Keep container closed. Use only with

adequate ventilation. Refer to Section 8.

Storage: For safe storage, store at or below 38 °C (100.4 °F)

Keep in a cool, well ventilated area away from heat, sparks and open flame.

Keep container tightly closed until ready for use.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Employers should complete an assessment of all workplaces to determine the need for, and selection of, proper exposure controls and protective equipment for each task performed.

Hazardous Component(s)	ACGIH TLV	OSHA PEL	AIHA WEEL	OTHER
Tetramethylene dimethacrylate	None	None	None	None
Amorphous fumed silica	None	0.8 mg/m3 TWA 20 MPPCF TWA	None	None
Ethene, homopolymer	10 mg/m3 TWA Inhalable particles. 3 mg/m3 TWA Respirable particles.	15 MPPCF TWA Respirable fraction. 15 mg/m3 TWA Total dust. 50 MPPCF TWA Total dust. 5 mg/m3 TWA Respirable fraction. 5 mg/m3 PEL Respirable fraction. 15 mg/m3 PEL Total dust.	None	None
Propane-1,2-diol	None	None	10 mg/m3 TWA Aerosol.	None
Cumene hydroperoxide	None	None	1 ppm (6 mg/m3) TWA (SKIN)	None
1-Acetyl-2-phenylhydrazine	None	None	None	None
Cumene	50 ppm TWA	50 ppm (245 mg/m3) PEL (SKIN)	None	None

Engineering controls: Provide adequate local exhaust ventilation to maintain worker exposure below

exposure limits.

Respiratory protection: Use NIOSH approved respirator if there is potential to exceed exposure

limit(s).

Eye/face protection: Safety goggles or safety glasses with side shields. Full face protection should

be used if the potential for splashing or spraying of product exists. Safety

showers and eye wash stations should be available.

Skin protection:Use chemical resistant, impermeable clothing including gloves and either an

apron or body suit to prevent skin contact. Butyl rubber gloves. Neoprene

gloves. Natural rubber gloves.

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical state: LiquidLiquid Color: LiquidLiquid BlueBlue

Odor: CharacteristicCharacteristic

Odor threshold:

pH:

Not available.

Not available.

Vapor pressure: < 0.1 mm hg (27 °C (80.6 °F)) **Boiling point/range:** > 149 °C (> 300.2 °F)

IDH number: 1329467 Product name: LOCTITE 243 THREADLOCKER 50ML

Melting point/ range: Not available.

Specific gravity: 1.09

Vapor density: Not available.

Flash point: > 93 °C (> 199.4 °F)

Flammable/Explosive limits - lower:
Flammable/Explosive limits - upper:
Autoignition temperature:
Flammability:
Flammability:
Evaporation rate:
Solubility in water:
Not available.
Not applicable
Not available.
Slight

Partition coefficient (n-octanol/water):

VOC content:

Viscosity:

Decomposition temperature:

Not available.

1.09 %; 11.88 g/l

Not available.

Not available.

10. STABILITY AND REACTIVITY

Stability: Stable under normal conditions of storage and use.

Hazardous reactions: None under normal processing. Polymerization may occur at elevated temperature or in the

presence of incompatible materials.

Hazardous decomposition

products:

IDH number: 1329467

Oxides of carbon. Oxides of nitrogen. Oxides of sulfur. Irritating organic fragments.

Incompatible materials: Strong oxidizing agents. Reducing agents. Strong alkalis. Oxygen scavengers. Other

polymerization initiators. Heavy metals.

Reactivity: Not available.

Conditions to avoid: Elevated temperatures. Heat, flames, sparks and other sources of ignition. Store away from

incompatible materials.

11. TOXICOLOGICAL INFORMATION

Relevant routes of exposure: Skin, Inhalation, Eyes, Ingestion

Potential Health Effects/Symptoms

Inhalation: Inhalation of vapors or mists of the product may be irritating to the respiratory system.

Skin contact: Causes skin irritation. May cause allergic skin reaction.

Eye contact: Causes serious eye irritation.

Ingestion: May cause gastrointestinal tract irritation if swallowed.

Hazardous Component(s)	LD50s and LC50s	Immediate and Delayed Health Effects
Tetramethylene dimethacrylate	None	Irritant, Allergen
Amorphous fumed silica	None	No Target Organs
Ethene, homopolymer	None	No Target Organs
Propane-1,2-diol	Oral LD50 (Rabbit) = 18 g/kg Oral LD50 (Mouse) = 23.9 g/kg Oral LD50 (Rat) = 30 g/kg	Irritant
Cumene hydroperoxide	Inhalation LC50 (Mouse, 4 h) = 200 mg/l	Allergen, Central nervous system, Corrosive, Irritant, Mutagen
1-Acetyl-2-phenylhydrazine	Oral LD50 (Mouse) = 270 mg/kg	Allergen, Blood, Kidney, Mutagen, Some evidence of carcinogenicity
Cumene	Oral LD50 (Rat) = 2.91 g/kg Oral LD50 (Rat) = 1,400 mg/kg Inhalation LC50 (Rat, 4 h) = 8000 ppm	Central nervous system, Irritant, Lung

Hazardous Component(s)	NTP Carcinogen	IARC Carcinogen	OSHA Carcinogen (Specifically Regulated)
Tetramethylene dimethacrylate	No	No	No
Amorphous fumed silica	No	No	No
Ethene, homopolymer	No	No	No
Propane-1,2-diol	No	No	No
Cumene hydroperoxide	No	No	No
1-Acetyl-2-phenylhydrazine	No	No	No
Cumene	Reasonably Anticipated to be a Human Carcinogen.	Group 2B	No

12. ECOLOGICAL INFORMATION

Ecological information: Not available.

13. DISPOSAL CONSIDERATIONS

Information provided is for unused product only.

Recommended method of disposal: Follow all local, state, federal and provincial regulations for disposal.

Hazardous waste number: Not a RCRA hazardous waste.

14. TRANSPORT INFORMATION

The transport information provided in this section only applies to the material/formulation itself, and is not specific to any package/configuration.

U.S. Department of Transportation Ground (49 CFR)

Proper shipping name: RQ, Environmentally hazardous substance, liquid, n.o.s.

Hazard class or division: 9
Identification number: UN 3082
Packing group: III

DOT Hazardous Substance(s): alpha,alpha-Dimethylbenzylhydroperoxide

IDH number: 1329467 Product name: LOCTITE 243 THREADLOCKER 50ML

International Air Transportation (ICAO/IATA)

Proper shipping name: RQ, Environmentally hazardous substance, liquid, n.o.s. (Fatty acid amide)

Hazard class or division: Identification number: UN 3082 Packing group: Ш

Water Transportation (IMO/IMDG)

Proper shipping name: RQ, ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Fatty

acid amide)

Ш

Hazard class or division: 9 Identification number: UN 3082

Packing group: Marine pollutant: Fatty acid amide

15. REGULATORY INFORMATION

United States Regulatory Information

TSCA 8 (b) Inventory Status: All components are listed or are exempt from listing on the Toxic Substances Control Act

Inventory.

TSCA 12 (b) Export Notification: None above reporting de minimis

None above reporting de minimis. CERCLA/SARA Section 302 EHS: CERCLA/SARA Section 311/312: Immediate Health, Delayed Health CERCLA/SARA Section 313: None above reporting de minimis.

CERCLA Reportable quantity: Cumene hydroperoxide (CAS# 80-15-9) 10 lbs. (4.54 kg)

California Proposition 65: This product contains a chemical known in the State of California to cause cancer. This

product contains a chemical known to the State of California to cause birth defects or other

reproductive harm.

Canada Regulatory Information

CEPA DSL/NDSL Status: All components are listed on or are exempt from listing on the Canadian Domestic

Substances List.

16. OTHER INFORMATION

This safety data sheet contains changes from the previous version in sections: 2

Prepared by: Product Safety and Regulatory Affairs

Issue date: 10/05/2017

DISCLAIMER: The data contained herein are furnished for information only and are believed to be reliable. However, Henkel Corporation and its affiliates ("Henkel") does not assume responsibility for any results obtained by persons over whose methods Henkel has no control. It is the user's responsibility to determine the suitability of Henkel's products or any production methods mentioned herein for a particular purpose, and to adopt such precautions as may be advisable for the protection of property and persons against any hazards that may be involved in the handling and use of any Henkel's products. In light of the foregoing, Henkel specifically disclaims all warranties, express or implied, including warranties of merchantability and fitness for a particular purpose, arising from sale or use of Henkel's products. Henkel further disclaims any liability for consequential or incidental damages of any kind, including lost profits.

Product name: LOCTITE 243 THREADLOCKER 50ML IDH number: 1329467



Revision Number: 003.1 Issue date: 01/18/2017

1. PRODUCT AND COMPANY IDENTIFICATION

Product name: LOCTITE 5671 MED. STRENGTH

THREAD LOCKER known as LOCTITE® Quickstix™ 5671™

Product type: Anaerobic Sealant Restriction of Use: None identified

Company address: Henkel Corporation Henkel Way One

Rocky Hill, Connecticut 06067

IDH number: 1276167

Item number: 1276167 **Region:** United States

Contact information:

Telephone: +1 (860) 571-5100

MEDICAL EMERGÉNCY Phone: Poison Control Center 1-877-671-4608 (toll free) or 1-303-592-1711 TRANSPORT EMERGENCY Phone: CHEMTREC 1-800-424-9300 (toll free) or 1-703-527-3887

Internet: www.henkelna.com

2. HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW

WARNING: CAUSES SKIN IRRITATION.

MAY CAUSE AN ALLERGIC SKIN REACTION.

CAUSES SERIOUS EYE IRRITATION.

HAZARD CLASS	HAZARD CATEGORY
SKIN IRRITATION	2
EYE IRRITATION	2A
SKIN SENSITIZATION	1

PICTOGRAM(S)



Precautionary Statements

Prevention: Avoid breathing vapors, mist, or spray. Wash affected area thoroughly after handling.

Contaminated work clothing should not be allowed out of the workplace. Wear protective

gloves, eye protection, and face protection.

Response: IF ON SKIN: Wash with plenty of water. IF IN EYES: Rinse cautiously with water for several

minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If skin irritation or rash occurs: Get medical attention. If eye irritation persists: Get medical attention. Take off

contaminated clothing.

Storage: Not prescribed

Disposal: Dispose of contents and/or container according to Federal, State/Provincial and local

governmental regulations.

Classification complies with OSHA Hazard Communication Standard (29 CFR 1910.1200) and is consistent with the provisions of the United Nations Globally Harmonized System of Classification and Labeling of Chemicals (GHS).

See Section 11 for additional toxicological information.

3. COMPOSITION / INFORMATION ON INGREDIENTS

Hazardous Component(s)	CAS Number	Percentage*
2-Propenoic acid, 2-methyl-, (1-methylethylidene)	24448-20-2	50 - 60
Polyglycol dimethacrylate	25852-47-5	10 - 20
Ethene, tetrafluoro-, homopolymer	9002-84-0	5 - 10
Hydroxyalkyl methacrylate	27813-02-1	5 - 10
Cumene hydroperoxide	80-15-9	1 - 5
Silica, amorphous, fumed, crystal-free	112945-52-5	1 - 5
Ethylene glycol	107-21-1	0.1 - 1
1-Acetyl-2-phenylhydrazine	114-83-0	0.1 - 1
Cumene	98-82-8	0.1 - 1
Methacrylic acid	79-41-4	0.1 - 1

^{*} Exact percentages may vary or are trade secret. Concentration range is provided to assist users in providing appropriate protections.

4. FIRST AID MEASURES

Inhalation: Move to fresh air. If not breathing, give artificial respiration. If breathing is

difficult, give oxygen. Get medical attention.

Skin contact: Immediately flush skin with plenty of water (using soap, if available). Remove

contaminated clothing and footwear. Wash clothing before reuse. Get medical

attention.

Eye contact: Rinse immediately with plenty of water, also under the eyelids, for at least 15

minutes. Get medical attention.

Ingestion: DO NOT induce vomiting unless directed to do so by medical personnel.

Never give anything by mouth to an unconscious person. Get medical

attention.

Symptoms: See Section 11.

5. FIRE FIGHTING MEASURES

Extinguishing media: Foam, dry chemical or carbon dioxide.

Special firefighting procedures: Wear self-contained breathing apparatus and full protective clothing, such as

turn-out gear. In case of fire, keep containers cool with water spray.

Uncontrolled polymerization may occur at high temperatures resulting in

explosions or rupture of storage containers.

Hazardous combustion products: Oxides of carbon. Oxides of nitrogen. Irritating organic vapours. Toxic fluorine

compounds.

6. ACCIDENTAL RELEASE MEASURES

Use personal protection recommended in Section 8, isolate the hazard area and deny entry to unnecessary and unprotected personnel.

Environmental precautions: Do not allow product to enter sewer or waterways.

Clean-up methods: Remove all sources of ignition. Evacuate and ventilate spill area; dike spill to

prevent entry into water system; wear full protective equipment during cleanup. Soak up with inert absorbent material (e.g. sand, silica gel, acid binder, universal binder, sawdust). Scrape up as much material as possible. Store in a partly filled, closed container until disposal. Refer to Section 8 "Exposure

Controls / Personal Protection" prior to clean up.

7. HANDLING AND STORAGE

Handling: Use only with adequate ventilation. Prevent contact with eyes, skin and

clothing. Do not breathe vapor and mist. Wash thoroughly after handling.

Keep container closed. Refer to Section 8.

Storage: For safe storage, store at or below 38 °C (100.4 °F)

Keep in a cool, well ventilated area away from heat, sparks and open flame.

Keep container tightly closed until ready for use.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Employers should complete an assessment of all workplaces to determine the need for, and selection of, proper exposure controls and protective equipment for each task performed.

Hazardous Component(s)	ACGIH TLV	OSHA PEL	AIHA WEEL	OTHER
2-Propenoic acid, 2-methyl-, (1-methylethylidene)	None	None	None	None
Polyglycol dimethacrylate	None	None	None	None
Ethene, tetrafluoro-, homopolymer	None	None	None	10 mg/m3 TWA Total dust. 5 mg/m3 TWA Respirable fraction.
Hydroxyalkyl methacrylate	None	None	None	1 ppm TWA 3 ppm STEL
Cumene hydroperoxide	None	None	1 ppm (6 mg/m3) TWA (SKIN)	None
Silica, amorphous, fumed, crystal-free	10 mg/m3 TWA Inhalable dust. 3 mg/m3 TWA Respirable fraction.	20 MPPCF TWA 0.8 mg/m3 TWA	None	None
Ethylene glycol	100 mg/m3 Ceiling Aerosol.	None	None	None
1-Acetyl-2-phenylhydrazine	None	None	None	None
Cumene	50 ppm TWA	50 ppm (245 mg/m3) PEL (SKIN)	None	None
Methacrylic acid	20 ppm TWA	None	None	None

Engineering controls: Provide adequate local exhaust ventilation to maintain worker exposure below

exposure limits.

Respiratory protection: Use NIOSH approved respirator if there is potential to exceed exposure

limit(s).

Eye/face protection: Safety goggles or safety glasses with side shields. Full face protection should

be used if the potential for splashing or spraying of product exists. Safety

showers and eye wash stations should be available.

Skin protection:Use chemical resistant, impermeable clothing including gloves and either an

apron or body suit to prevent skin contact.

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical state:Solid, GelColor:Off whiteOdor:MildOdor threshold:Not available

Odor threshold:

pH:

Not available.

Not available.

 Vapor pressure:
 < 10 mm hg (27 °C (80.6 °F))</td>

 Boiling point/range:
 > 149 °C (> 300.2 °F)

Melting point/ range: Not available.

Specific gravity: 1.0274 Vapor density: Not available. Flash point: Product is a solid. Flammable/Explosive limits - lower: Not available. Flammable/Explosive limits - upper: Not available. Autoignition temperature: Not available. Flammability: Not applicable Evaporation rate: Not available. Solubility in water: Slight Partition coefficient (n-octanol/water): Not available. **VOC** content: 2.36 %: 24.25 a/l Viscosity: Not available.

10. STABILITY AND REACTIVITY

Not available.

Stability: Stable under normal conditions of storage and use.

Hazardous reactions: None under normal processing. Polymerization may occur at elevated temperature or in the

presence of incompatible materials.

Hazardous decomposition

Decomposition temperature:

products:

IDH number: 1276167

Oxides of carbon. Toxic fluorine compounds. Irritating organic vapours. Oxides of nitrogen.

Incompatible materials: Strong oxidizing agents.

Reactivity: Not available.

Conditions to avoid: Elevated temperatures. Heat, flames, sparks and other sources of ignition. Store away from

incompatible materials.

11. TOXICOLOGICAL INFORMATION

Relevant routes of exposure: Skin, Inhalation, Eyes, Ingestion

Potential Health Effects/Symptoms

Inhalation of vapors or mists of the product may be irritating to the respiratory system. Inhalation: Skin contact:

Causes skin irritation. May cause allergic skin reaction.

Causes serious eye irritation. Eye contact:

May cause gastrointestinal tract irritation if swallowed. Ingestion:

Hazardous Component(s)	LD50s and LC50s	Immediate and Delayed Health Effects
2-Propenoic acid, 2-methyl-, (1-methylethylidene)	None	Irritant, Allergen
Polyglycol dimethacrylate	None	Allergen, Irritant
Ethene, tetrafluoro-, homopolymer	None	No Target Organs
Hydroxyalkyl methacrylate	None	Irritant, Allergen
Cumene hydroperoxide	Inhalation LC50 (Mouse, 4 h) = 200 mg/l	Allergen, Central nervous system, Corrosive, Irritant, Mutagen
Silica, amorphous, fumed, crystal-free	None	Nuisance dust
Ethylene glycol	Oral LD50 (Rat) = 5.89 g/kg Oral LD50 (Mouse) = 14.6 g/kg Dermal LD50 (Rabbit) = 9,530 mg/kg	Blood, Bone Marrow, Central nervous system, Developmental, Eyes, Irritant, Kidney, Liver, Metabolic
1-Acetyl-2-phenylhydrazine	Oral LD50 (Mouse) = 270 mg/kg	Allergen, Blood, Kidney, Mutagen, Some evidence of carcinogenicity
Cumene	Oral LD50 (Rat) = 2.91 g/kg Oral LD50 (Rat) = 1,400 mg/kg Inhalation LC50 (Rat, 4 h) = 8000 ppm	Central nervous system, Irritant, Lung
Methacrylic acid	Oral LD50 (Mouse) = 1,332 mg/kg Oral LD50 (Mouse) = 1,600 mg/kg Oral LD50 (Mouse) = 1,250 mg/kg Oral LD50 (Rabbit) = 1,200 mg/kg Oral LD50 (Rat) = 1,060 mg/kg Oral LD50 (Rat) = 2,224 mg/kg Dermal LD50 (Rabbit) = 500 mg/kg Inhalation LC50 (Rat, 4 h) = 7.1 mg/l	Corrosive, Irritant, Allergen

Hazardous Component(s)	NTP Carcinogen	IARC Carcinogen	OSHA Carcinogen (Specifically Regulated)
2-Propenoic acid, 2-methyl-, (1-methylethylidene)	No	No	No
Polyglycol dimethacrylate	No	No	No
Ethene, tetrafluoro-, homopolymer	No	No	No
Hydroxyalkyl methacrylate	No	No	No
Cumene hydroperoxide	No	No	No
Silica, amorphous, fumed, crystal-free	No	No	No
Ethylene glycol	No	No	No
1-Acetyl-2-phenylhydrazine	No	No	No
Cumene	Reasonably Anticipated to be a Human Carcinogen.	Group 2B	No
Methacrylic acid	No	No	No

12. ECOLOGICAL INFORMATION

Ecological information: Not available.

IDH number: 1276167

13. DISPOSAL CONSIDERATIONS

Information provided is for unused product only.

Recommended method of disposal: Follow all local, state, federal and provincial regulations for disposal.

Hazardous waste number:Not a RCRA hazardous waste.

14. TRANSPORT INFORMATION

The transport information provided in this section only applies to the material/formulation itself, and is not specific to any package/configuration.

U.S. Department of Transportation Ground (49 CFR)

Proper shipping name: RQ, Environmentally hazardous substances, solid, n.o.s.

Hazard class or division: 9
Identification number: UN 3077

Packing group:

DOT Hazardous Substance(s): alpha,alpha-Dimethylbenzylhydroperoxide

International Air Transportation (ICAO/IATA)

Proper shipping name: RQ, Environmentally hazardous substance, solid, n.o.s.

Hazard class or division: 9
Identification number: UN 3077
Packing group: III

Water Transportation (IMO/IMDG)

Proper shipping name: RQ, ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S.

Hazard class or division: 9
Identification number: UN 3077
Packing group: III

15. REGULATORY INFORMATION

United States Regulatory Information

TSCA 8 (b) Inventory Status: All components are listed or are exempt from listing on the Toxic Substances Control Act

nventory.

TSCA 12 (b) Export Notification: Ethene, tetrafluoro-, homopolymer (CAS# 9002-84-0).

CERCLA/SARA Section 302 EHS: None above reporting de minimis.
CERCLA/SARA Section 311/312: Immediate Health, Delayed Health

CERCLA/SARA Section 313: This product contains the following toxic chemicals subject to the reporting requirements of

section 313 of the Emergency Planning and Community Right-To-Know Act of 1986 (40

CFR 372). Cumene hydroperoxide (CAS# 80-15-9).

CERCLA Reportable quantity: Cumene hydroperoxide (CAS# 80-15-9) 10 lbs. (4.54 kg)

California Proposition 65: This product contains a chemical known in the State of California to cause cancer. This

product contains a chemical known to the State of California to cause birth defects or other

reproductive harm.

Canada Regulatory Information

IDH number: 1276167

CEPA DSL/NDSL Status: All components are listed on or are exempt from listing on the Canadian Domestic

Substances List.

16. OTHER INFORMATION

This safety data sheet contains changes from the previous version in sections: Reviewed SDS. Reissued with new date.

Product name: LOCTITE 5671 MED. STRENGTH THREAD LOCKER known as LOCTITE® Quickstix™ 5671™ Prepared by: Sheila Gines, Regulatory Affairs Specialist

Issue date: 01/18/2017

DISCLAIMER: The data contained herein are furnished for information only and are believed to be reliable. However, Henkel Corporation and its affiliates ("Henkel") does not assume responsibility for any results obtained by persons over whose methods Henkel has no control. It is the user's responsibility to determine the suitability of Henkel's products or any production methods mentioned herein for a particular purpose, and to adopt such precautions as may be advisable for the protection of property and persons against any hazards that may be involved in the handling and use of any Henkel's products. In light of the foregoing, Henkel specifically disclaims all warranties, express or implied, including warranties of merchantability and fitness for a particular purpose, arising from sale or use of Henkel's products. Henkel further disclaims any liability for consequential or incidental damages of any kind, including lost profits.



Revision Number: 001.1 Issue date: 06/17/2016

1. PRODUCT AND COMPANY IDENTIFICATION

Product name: LOCTITE® 5452™ THREAD SEALANT IDH number: 1265769 Product type: Item number: 1265769 Sealant Restriction of Use: None identified Region: **United States**

Company address: Henkel Corporation

Henkel Way One

MEDICAL EMERGENCY Phone: Poison Control Center Rocky Hill, Connecticut 06067 1-877-671-4608 (toll free) or 1-303-592-1711 TRANSPORT EMERGENCY Phone: CHEMTREC 1-800-424-9300 (toll free) or 1-703-527-3887

Internet: www.henkelna.com

Telephone: +1 (860) 571-5100

Contact information:

2. HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW WARNING: CAUSES SKIN IRRITATION. MAY CAUSE AN ALLERGIC SKIN REACTION. CAUSES SERIOUS EYE IRRITATION.

HAZARD CLASS	HAZARD CATEGORY
SKIN IRRITATION	2
EYE IRRITATION	2A
SKIN SENSITIZATION	1

PICTOGRAM(S)



Precautionary Statements

Prevention: Avoid breathing vapors, mist, or spray. Wash affected area thoroughly after handling.

Contaminated work clothing should not be allowed out of the workplace. Wear protective

gloves, eye protection, and face protection.

IF ON SKIN: Wash with plenty of water. IF IN EYES: Rinse cautiously with water for several Response:

minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If skin irritation or rash occurs: Get medical attention. If eye irritation persists: Get medical attention. Take off

contaminated clothing.

Storage: Not prescribed

Disposal: Dispose of contents and/or container according to Federal, State/Provincial and local

governmental regulations.

Classification complies with OSHA Hazard Communication Standard (29 CFR 1910.1200) and is consistent with the provisions of the United Nations Globally Harmonized System of Classification and Labeling of Chemicals (GHS).

See Section 11 for additional toxicological information.

3. COMPOSITION / INFORMATION ON INGREDIENTS

Hazardous Component(s)	CAS Number	Percentage*

IDH number: 1265769 Product name: LOCTITE® 5452™ THREAD SEALANT

Glyceryl ester	Proprietary	30 - 60
Polyglycol dimethacrylate	Proprietary	10 - 30
Dimethacrylate ester	Proprietary	10 - 30
Silica, amorphous, fumed, crystal-free	112945-52-5	1 - 5
Saccharin	81-07-2	1 - 5
Cumene hydroperoxide	80-15-9	1 - 5
Cumene	98-82-8	0.1 - 1

^{*} Exact percentage is a trade secret. Concentration range is provided to assist users in providing appropriate protections.

4. FIRST AID MEASURES

Inhalation: Move to fresh air. If not breathing, give artificial respiration. If breathing is

difficult, give oxygen. Get medical attention.

Skin contact: Immediately flush skin with plenty of water (using soap, if available). Remove

contaminated clothing and footwear. Wash clothing before reuse. Get medical

attention.

Eye contact: Rinse immediately with plenty of water, also under the eyelids, for at least 15

minutes. Get medical attention.

Ingestion: DO NOT induce vomiting unless directed to do so by medical personnel.

Never give anything by mouth to an unconscious person. Get medical

attention.

Symptoms: See Section 11.

5. FIRE FIGHTING MEASURES

Extinguishing media: Water spray (fog), foam, dry chemical or carbon dioxide.

Special firefighting procedures: Wear self-contained breathing apparatus and full protective clothing, such as

turn-out gear. In case of fire, keep containers cool with water spray.

Uncontrolled polymerization may occur at high temperatures resulting in

explosions or rupture of storage containers.

Hazardous combustion products: Oxides of carbon, oxides of nitrogen, irritating organic vapors. Sulphur oxides

6. ACCIDENTAL RELEASE MEASURES

Use personal protection recommended in Section 8, isolate the hazard area and deny entry to unnecessary and unprotected personnel.

Environmental precautions: Do not allow product to enter sewer or waterways.

Clean-up methods: Remove all sources of ignition. Evacuate and ventilate spill area; dike spill to prevent entry into water system; wear full protective equipment during clean-

up. Soak up with inert absorbent material (e.g. sand, silica gel, acid binder, universal binder, sawdust). Scrape up as much material as possible. Store in a partly filled, closed container until disposal. Refer to Section 8 "Exposure

Controls / Personal Protection" prior to clean up.

7. HANDLING AND STORAGE

Handling: Use only with adequate ventilation. Prevent contact with eyes, skin and

clothing. Do not breathe vapor and mist. Wash thoroughly after handling.

Keep container closed. Refer to Section 8.

Storage: Keep in a cool, well ventilated area away from heat, sparks and open flame.

Keep container tightly closed until ready for use.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Employers should complete an assessment of all workplaces to determine the need for, and selection of, proper exposure controls and protective equipment for each task performed.

Hazardous Component(s)	ACGIH TLV	OSHA PEL	AIHA WEEL	OTHER
Glyceryl ester	None	None	None	None
Polyglycol dimethacrylate	None	None	None	None
Dimethacrylate ester	None	None	None	None
Silica, amorphous, fumed, crystal-free	10 mg/m3 TWA Inhalable dust. 3 mg/m3 TWA Respirable fraction.	20 MPPCF TWA 0.8 mg/m3 TWA	None	None
Saccharin	None	None	None	None
Cumene hydroperoxide	None	None	1 ppm (6 mg/m3) TWA (SKIN)	None
Cumene	50 ppm TWA	50 ppm (245 mg/m3) PEL (SKIN)	None	None

Engineering controls: Provide adequate local exhaust ventilation to maintain worker exposure below

exposure limits.

Respiratory protection: Use NIOSH approved respirator if there is potential to exceed exposure

limit(s).

Eye/face protection: Safety goggles or safety glasses with side shields. Full face protection should

be used if the potential for splashing or spraying of product exists. Safety

showers and eye wash stations should be available.

Skin protection: Use chemical resistant, impermeable clothing including gloves and either an

apron or body suit to prevent skin contact. Neoprene gloves.

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical state:LiquidColor:PurpleOdor:MildOdor threshold:Not avail

Odor threshold:

PH:

Not available.

1.15

Vapor density: Not available.

Flash point: > 93 °C (> 199.4 °F) ASTM D3278 Setaflash Closed Cup

Flammable/Explosive limits - lower:

Flammable/Explosive limits - upper:

Autoignition temperature:

Flammability:

Evaporation rate:

Solubility in water:

Partition coefficient (n-octanol/water):

Not available.

Not available.

Not available.

Not available.

Not available.

IDH number: 1265769 Product name: LOCTITE® 5452™ THREAD SEALANT

VOC content: 0.24 % (ASTM D5403)
Viscosity: Not available.

Decomposition temperature: Not available.

10. STABILITY AND REACTIVITY

Stability: Stable under normal conditions of storage and use.

Hazardous reactions: None under normal processing. Polymerization may occur at elevated temperature or in the

presence of incompatible materials.

Hazardous decomposition

products:

Oxides of carbon. Oxides of nitrogen. Sulphur oxides Irritating organic vapours.

Incompatible materials: Strong oxidizing agents. Reducing agents. Metal compounds. Acids. Alkalis. Free radical

initiators. Inert gases. Oxygen scavengers.

Reactivity: Not available.

Conditions to avoid: Extremes of temperature and direct sunlight. Heat, flames, sparks and other sources of

ignition. Store away from incompatible materials. UV light.

11. TOXICOLOGICAL INFORMATION

Relevant routes of exposure: Skin, Inhalation, Eyes, Ingestion

Potential Health Effects/Symptoms

Inhalation: Inhalation of vapors or mists of the product may be irritating to the respiratory system.

Skin contact: Causes skin irritation. May cause allergic skin reaction.

Eye contact: Causes serious eye irritation.

Ingestion: May cause gastrointestinal tract irritation if swallowed.

Hazardous Component(s)	LD50s and LC50s	Immediate and Delayed Health Effects
Glyceryl ester	Oral LD50 (Rat) = 3,000 mg/kg Dermal LD50 (Rabbit) = > 5 g/kg Inhalation LC50 (Rat, 4 h) = > 1.721 mg/l	Irritant
Polyglycol dimethacrylate	None	Allergen, Irritant
Dimethacrylate ester	None	Irritant, Allergen
Silica, amorphous, fumed, crystal-free	None	Nuisance dust
Saccharin	Oral LD50 (Mouse) = 17 g/kg	No Target Organs
Cumene hydroperoxide	Inhalation LC50 (Mouse, 4 h) = 200 mg/l	Allergen, Central nervous system, Corrosive, Irritant, Mutagen
Cumene	Oral LD50 (Rat) = 2.91 g/kg Oral LD50 (Rat) = 1,400 mg/kg Inhalation LC50 (Rat, 4 h) = 8000 ppm	Central nervous system, Irritant, Lung

Hazardous Component(s)	NTP Carcinogen	IARC Carcinogen	OSHA Carcinogen (Specifically Regulated)
Glyceryl ester	No	No	No
Polyglycol dimethacrylate	No	No	No
Dimethacrylate ester	No	No	No
Silica, amorphous, fumed, crystal-free	No	No	No
Saccharin	No	No	No
Cumene hydroperoxide	No	No	No
Cumene	Reasonably Anticipated to be a Human Carcinogen.	Group 2B	No

IDH number: 1265769 Product name: LOCTITE® 5452™ THREAD SEALANT

12. ECOLOGICAL INFORMATION

Ecological information: Not available.

13. DISPOSAL CONSIDERATIONS

Information provided is for unused product only.

Recommended method of disposal: Follow all local, state, federal and provincial regulations for disposal.

Hazardous waste number: Not a RCRA hazardous waste.

14. TRANSPORT INFORMATION

The transport information provided in this section only applies to the material/formulation itself, and is not specific to any package/configuration.

U.S. Department of Transportation Ground (49 CFR)

Proper shipping name: RQ, Environmentally hazardous substance, liquid, n.o.s.

Hazard class or division: 9
Identification number: UN 3082
Packing group: III

Packing group:

DOT Hazardous Substance(s):

alpha,alpha-Dimethylbenzylhydroperoxide

International Air Transportation (ICAO/IATA)

Proper shipping name: RQ, Environmentally hazardous substance, liquid, n.o.s.

Hazard class or division: 9
Identification number: UN 3082
Packing group: III

Water Transportation (IMO/IMDG)

Proper shipping name: RQ, ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.

Hazard class or division: 9
Identification number: UN 3082
Packing group: III

15. REGULATORY INFORMATION

United States Regulatory Information

TSCA 8 (b) Inventory Status: All components are listed or are exempt from listing on the Toxic Substances Control Act

Inventory.

TSCA 12 (b) Export Notification: None above reporting de minimis

CERCLA/SARA Section 302 EHS: None above reporting de minimis.

CERCLA/SARA Section 311/312: Immediate Health, Delayed Health
CERCLA/SARA Section 313: This product contains the following

CERCLA/SARA Section 313: This product contains the following toxic chemicals subject to the reporting requirements of section 313 of the Emergency Planning and Community Right-To-Know Act of 1986 (40

CFR 372). Saccharin (CAS# 81-07-2). Cumene hydroperoxide (CAS# 80-15-9).

CERCLA Reportable quantity: Cumene hydroperoxide (CAS# 80-15-9) 10 lbs. (4.54 kg)

California Proposition 65: This product contains a chemical known in the State of California to cause cancer. This

product contains a chemical known to the State of California to cause birth defects or other

reproductive harm.

Canada Regulatory Information

CEPA DSL/NDSL Status: All components are listed on or are exempt from listing on the Canadian Domestic

Substances List.

16. OTHER INFORMATION

This safety data sheet contains changes from the previous version in sections: New Safety Data Sheet format.

Prepared by: Sheila Gines, Regulatory Affairs Specialist

Issue date: 06/17/2016

DISCLAIMER: The data contained herein are furnished for information only and are believed to be reliable. However, Henkel Corporation and its affiliates ("Henkel") does not assume responsibility for any results obtained by persons over whose methods Henkel has no control. It is the user's responsibility to determine the suitability of Henkel's products or any production methods mentioned herein for a particular purpose, and to adopt such precautions as may be advisable for the protection of property and persons against any hazards that may be involved in the handling and use of any Henkel's products. In light of the foregoing, Henkel specifically disclaims all warranties, express or implied, including warranties of merchantability and fitness for a particular purpose, arising from sale or use of Henkel's products. Henkel further disclaims any liability for consequential or incidental damages of any kind, including lost profits.

IDH number: 1265769 Product name: LOCTITE® 5452™ THREAD SEALANT



Revision Number: 006.0 Issue date: 11/08/2017

1. PRODUCT AND COMPANY IDENTIFICATION

Product name: 660 Quick Metal® Retaining IDH number: 135527

Compound

Product type: Anaerobic Adhesive Item number: 66040 Restriction of Use: None identified Region: United States **Contact information:**

Company address: Henkel Corporation Henkel Way One

Telephone: +1 (860) 571-5100 MEDICAL EMERGENCY Phone: Poison Control Center Rocky Hill, Connecticut 06067 1-877-671-4608 (toll free) or 1-303-592-1711 TRANSPORT EMERGENCY Phone: CHEMTREC 1-800-424-9300 (toll free) or 1-703-527-3887

Internet: www.henkelna.com

2. HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW

DANGER: CAUSES SKIN IRRITATION.

MAY CAUSE AN ALLERGIC SKIN REACTION.

CAUSES SERIOUS EYE DAMAGE.

MAY CAUSE ALLERGY OR ASTHMA SYMPTOMS OR BREATHING

DIFFICULTIES IF INHALED.

SUSPECTED OF CAUSING CANCER.

MAY CAUSE DAMAGE TO ORGANS THROUGH PROLONGED OR

REPEATED EXPOSURE.

HAZARD CLASS	HAZARD CATEGORY
SKIN IRRITATION	2
SERIOUS EYE DAMAGE	1
RESPIRATORY SENSITIZATION	1
SKIN SENSITIZATION	1
CARCINOGENICITY	2
SPECIFIC TARGET ORGAN TOXICITY - REPEATED EXPOSURE	2





Precautionary Statements

Obtain special instructions before use. Do not handle until all safety precautions have been Prevention:

read and understood. Do not breathe vapors, mist, or spray. Wash affected area thoroughly after handling. Contaminated work clothing should not be allowed out of the workplace. Wear protective gloves, clothing, eye and face protection. In case of inadequate ventilation wear

respiratory protection.

IF ON SKÍN: Wash with plenty of water. IF INHALED: If breathing is difficult, remove victim to Response:

fresh air and keep at rest in a position comfortable for breathing. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. IF exposed or concerned: Get medical attention. If skin irritation or rash occurs: Get

medical attention. Take off contaminated clothing.

Storage: Store locked up.

IDH number: 135527 Product name: 660 Quick Metal® Retaining Compound Disposal: Dispose of contents and/or container according to Federal, State/Provincial and local

governmental regulations.

4 % of the mixture consists of ingredient(s) of unknown acute toxicity.

Classification complies with OSHA Hazard Communication Standard (29 CFR 1910.1200) and is consistent with the provisions of the United Nations Globally Harmonized System of Classification and Labeling of Chemicals (GHS).

See Section 11 for additional toxicological information.

3. COMPOSITION / INFORMATION ON INGREDIENTS

Hazardous Component(s)	CAS Number	Percentage*	
Bisphenol A, 2-EO dimethacrylate	41637-38-1	30 - 40	
Hydroxyalkyl methacrylate	27813-02-1	30 - 40	
Silica, amorphous, fumed, crystal-free	112945-52-5	5 - 10	
Cumene hydroperoxide	80-15-9	1 - 5	
2,5-Furandione, telomer with ethenylbenzene and (1-methylethyl)benzene	26762-29-8	0.1 - 1	
Methacrylic acid	79-41-4	0.1 - 1	
Cumene	98-82-8	0.1 - 1	
1-Acetyl-2-phenylhydrazine	114-83-0	0.1 - 1	
Titanium dioxide	13463-67-7	0.1 - 1	

^{*} Exact percentages may vary or are trade secret. Concentration range is provided to assist users in providing appropriate protections.

4. FIRST AID MEASURES

Inhalation: Move to fresh air. If breathing is difficult, give oxygen. If not breathing, give

artificial respiration. Get medical attention.

Skin contact: Immediately flush skin with plenty of water (using soap, if available). Remove

contaminated clothing and footwear. Wash clothing before reuse. Get medical

attention.

Eye contact: Rinse immediately with plenty of water, also under the eyelids, for at least 15

minutes. Get medical attention.

Ingestion: DO NOT induce vomiting unless directed to do so by medical personnel.

Never give anything by mouth to an unconscious person. Get medical

attention.

Symptoms: See Section 11.

5. FIRE FIGHTING MEASURES

Extinguishing media: Water spray (fog), foam, dry chemical or carbon dioxide.

Special firefighting procedures: Wear self-contained breathing apparatus and full protective clothing, such as

turn-out gear. In case of fire, keep containers cool with water spray.

Uncontrolled polymerization may occur at high temperatures resulting in

explosions or rupture of storage containers.

Hazardous combustion products: Oxides of carbon. Oxides of sulfur. Oxides of nitrogen. Irritating organic

vapours.

6. ACCIDENTAL RELEASE MEASURES

Use personal protection recommended in Section 8, isolate the hazard area and deny entry to unnecessary and unprotected personnel.

Environmental precautions: Do not allow product to enter sewer or waterways.

Clean-up methods: Remove all sources of ignition. Evacuate and ventilate spill area; dike spill to

prevent entry into water system; wear full protective equipment during cleanup. Soak up with inert absorbent material (e.g. sand, silica gel, acid binder, universal binder, sawdust). Scrape up as much material as possible. Store in a partly filled, closed container until disposal. Refer to Section 8 "Exposure

Controls / Personal Protection" prior to clean up.

7. HANDLING AND STORAGE

Handling: Use only with adequate ventilation. Prevent contact with eyes, skin and

clothing. Do not breathe vapor and mist. Wash thoroughly after handling.

Keep container closed. Refer to Section 8.

Storage: For safe storage, store at or below 38 °C (100.4 °F)

Keep in a cool, well ventilated area away from heat, sparks and open flame.

Keep container tightly closed until ready for use.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Employers should complete an assessment of all workplaces to determine the need for, and selection of, proper exposure controls and protective equipment for each task performed.

Hazardous Component(s)	ACGIH TLV	OSHA PEL	AIHA WEEL	OTHER
Bisphenol A, 2-EO dimethacrylate	None	None	None	None
Hydroxyalkyl methacrylate	None	None	None	1 ppm TWA 3 ppm STEL
Silica, amorphous, fumed, crystal-free	10 mg/m3 TWA Inhalable dust. 3 mg/m3 TWA Respirable fraction.	20 MPPCF TWA 0.8 mg/m3 TWA	None	None
Cumene hydroperoxide	None	None	1 ppm (6 mg/m3) TWA (SKIN)	None
2,5-Furandione, telomer with ethenylbenzene and (1-methylethyl)benzene	None	None	None	None
Methacrylic acid	20 ppm TWA	None	None	None
Cumene	50 ppm TWA	50 ppm (245 mg/m3) PEL (SKIN)	None	None
1-Acetyl-2-phenylhydrazine	None	None	None	None
Titanium dioxide	None None None None None None None None		None	None

IDH number: 135527 Product name: 660 Quick Metal® Retaining Compound

Engineering controls: Provide adequate local exhaust ventilation to maintain worker exposure below

exposure limits.

Respiratory protection: Use NIOSH approved respirator if there is potential to exceed exposure

limit(s).

Eye/face protection: Safety goggles or safety glasses with side shields. Full face protection should

be used if the potential for splashing or spraying of product exists. Safety

showers and eye wash stations should be available.

Skin protection: Use chemical resistant, impermeable clothing including gloves and either an

apron or body suit to prevent skin contact. Butyl rubber gloves. Neoprene

gloves. Natural rubber gloves.

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical state: Paste, Liquid Color: Silver Odor: Mild

Odor threshold:

PH:

Not available.

Not applicable

 Vapor pressure:
 < 5 mm hg (27 °C (80.6 °F))</td>

 Boiling point/range:
 > 149 °C (> 300.2 °F)

Melting point/ range: Not available.

Specific gravity: 1.1

Vapor density: Not available.

Flash point: > 93 °C (> 199.4 °F) Tagliabue closed cup

Flammable/Explosive limits - lower:
Flammable/Explosive limits - upper:
Autoignition temperature:
Flammability:
Flammability:
Flammability:
Flammability in vater:
Solubility in water:
Partition coefficient (n-octanol/water):

VOC content:

Not available.
1 16 % 12 75 g

VOC content:
Viscosity:
Not available.
Not available.
Not available.
Not available.
Not available.

10. STABILITY AND REACTIVITY

Stability: Stable under normal conditions of storage and use.

Hazardous reactions: None under normal processing. Polymerization may occur at elevated temperature or in the

presence of incompatible materials.

Hazardous decomposition

products:

IDH number: 135527

Oxides of carbon. Oxides of sulfur. Oxides of nitrogen. Irritating organic vapours.

Incompatible materials: Strong oxidizing agents.

Reactivity: Not available.

Conditions to avoid: Elevated temperatures. Heat, flames, sparks and other sources of ignition. Store away from

incompatible materials.

11. TOXICOLOGICAL INFORMATION

Relevant routes of exposure: Skin, Inhalation, Eyes, Ingestion

Potential Health Effects/Symptoms

Inhalation: May cause allergic respiratory reaction. These symptoms, which can include chest tightness,

wheezing, cough, shortness of breath or asthma attack, could be immediate or delayed (up to several hours after exposure). Inhalation of vapors or mists of the product may be irritating to

the respiratory system.

Skin contact: Causes skin irritation. May cause allergic skin reaction.

Eye contact: Causes serious eye damage.

Ingestion: May cause gastrointestinal disturbances.

Hazardous Component(s)	LD50s and LC50s	Immediate and Delayed Health Effects
Bisphenol A, 2-EO dimethacrylate	None	Allergen, Irritant
Hydroxyalkyl methacrylate	None	Irritant, Allergen
Silica, amorphous, fumed, crystal-free	None	Nuisance dust
Cumene hydroperoxide	Inhalation LC50 (Mouse, 4 h) = 200 mg/l	Allergen, Central nervous system, Corrosive, Irritant, Mutagen
2,5-Furandione, telomer with ethenylbenzene and (1-methylethyl)benzene	None	Irritant, Allergen, Respiratory, Corrosive, Eyes
Methacrylic acid	Oral LD50 (Mouse) = 1,332 mg/kg Oral LD50 (Mouse) = 1,600 mg/kg Oral LD50 (Mouse) = 1,250 mg/kg Oral LD50 (Rabbit) = 1,200 mg/kg Oral LD50 (Rat) = 1,060 mg/kg Oral LD50 (Rat) = 2,224 mg/kg Dermal LD50 (Rabbit) = 500 mg/kg Inhalation LC50 (Rat, 4 h) = 7.1 mg/l	Corrosive, Irritant, Allergen
Cumene	Oral LD50 (Rat) = 2.91 g/kg Oral LD50 (Rat) = 1,400 mg/kg Inhalation LC50 (Rat, 4 h) = 8000 ppm	Central nervous system, Irritant, Lung
1-Acetyl-2-phenylhydrazine	Oral LD50 (Mouse) = 270 mg/kg	Allergen, Blood, Kidney, Mutagen, Some evidence of carcinogenicity
Titanium dioxide	None	Irritant, Respiratory, Some evidence of carcinogenicity

Hazardous Component(s)	NTP Carcinogen	IARC Carcinogen	OSHA Carcinogen (Specifically Regulated)
Bisphenol A, 2-EO dimethacrylate	No	No	No
Hydroxyalkyl methacrylate	No	No	No
Silica, amorphous, fumed, crystal-free	No	No	No
Cumene hydroperoxide	No	No	No
2,5-Furandione, telomer with ethenylbenzene and (1-methylethyl)benzene	No	No	No
Methacrylic acid	No	No	No
Cumene	Reasonably Anticipated to be a Human Carcinogen.	Group 2B	No
1-Acetyl-2-phenylhydrazine	No	No	No
Titanium dioxide	No	Group 2B	No

12. ECOLOGICAL INFORMATION

Ecological information: Not available.

IDH number: 135527

13. DISPOSAL CONSIDERATIONS

Information provided is for unused product only.

Recommended method of disposal: Follow all local, state, federal and provincial regulations for disposal.

Hazardous waste number:Not a RCRA hazardous waste.

14. TRANSPORT INFORMATION

The transport information provided in this section only applies to the material/formulation itself, and is not specific to any package/configuration.

U.S. Department of Transportation Ground (49 CFR)

Proper shipping name: RQ, Environmentally hazardous substance, liquid, n.o.s.

Hazard class or division: 9
Identification number: UN 3082

Packing group:

DOT Hazardous Substance(s): alpha,alpha-Dimethylbenzylhydroperoxide

International Air Transportation (ICAO/IATA)

Proper shipping name: RQ, Environmentally hazardous substance, liquid, n.o.s.

Hazard class or division: 9
Identification number: UN 3082
Packing group: III

Water Transportation (IMO/IMDG)

Proper shipping name: RQ, ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.

Hazard class or division: 9
Identification number: UN 3082
Packing group: III

15. REGULATORY INFORMATION

United States Regulatory Information

TSCA 8 (b) Inventory Status: All components are listed or are exempt from listing on the Toxic Substances Control Act

Inventory.

TSCA 12 (b) Export Notification: None above reporting de minimis

CERCLA/SARA Section 302 EHS: None above reporting de minimis. CERCLA/SARA Section 311/312: Immediate Health, Delayed Health

CERCLA/SARA Section 313: This product contains the following toxic chemicals subject to the reporting requirements of

section 313 of the Emergency Planning and Community Right-To-Know Act of 1986 (40

CFR 372). Cumene hydroperoxide (CAS# 80-15-9).

CERCLA Reportable quantity: Cumene hydroperoxide (CAS# 80-15-9) 10 lbs. (4.54 kg)

California Proposition 65: This product contains a chemical known in the State of California to cause cancer. This

product contains a chemical known to the State of California to cause birth defects or other

reproductive harm.

Canada Regulatory Information

CEPA DSL/NDSL Status: Contains one or more components listed on the Non-Domestic Substances List. All other

components are listed on or are exempt from listing on the Domestic Substances List. Components listed on the NDSL must be tracked by all Canadian Importers of Record as required by Environment Canada. They may be imported into Canada in limited quantities.

Please contact Regulatory Affairs for additional details.

16. OTHER INFORMATION

This safety data sheet contains changes from the previous version in sections: 2,3

Prepared by: Product Safety and Regulatory Affairs

Issue date: 11/08/2017

DISCLAIMER: The data contained herein are furnished for information only and are believed to be reliable. However, Henkel Corporation and its affiliates ("Henkel") does not assume responsibility for any results obtained by persons over whose methods Henkel has no control. It is the user's responsibility to determine the suitability of Henkel's products or any production methods mentioned herein for a particular purpose, and to adopt such precautions as may be advisable for the protection of property and persons against any hazards that may be involved in the handling and use of any Henkel's products. In light of the foregoing, Henkel specifically disclaims all warranties, express or implied, including warranties of merchantability and fitness for a particular purpose, arising from sale or use of Henkel's products. Henkel further disclaims any liability for consequential or incidental damages of any kind, including lost profits.

IDH number: 135527 Product name: 660 Quick Metal® Retaining Compound



Revision Number: 007.0 Issue date: 01/19/2018

1. PRODUCT AND COMPANY IDENTIFICATION

Product name: **LOCTITE 222MS known as LOCTITE** IDH number:

SMALL SCRW TL 222

Product type: Anaerobic Sealant Item number: 22221 Restriction of Use: None identified Region: **United States Contact information:**

Company address: Henkel Corporation

Henkel Way One

Rocky Hill, Connecticut 06067

Telephone: +1 (860) 571-5100

MEDICAL EMERGENCY Phone: Poison Control Center 1-877-671-4608 (toll free) or 1-303-592-1711 TRANSPORT EMERGENCY Phone: CHEMTREC

135333

1-800-424-9300 (toll free) or 1-703-527-3887

Internet: www.henkelna.com

2. HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW

WARNING: CAUSES SKIN AND EYE IRRITATION.

MAY CAUSE DAMAGE TO ORGANS THROUGH PROLONGED OR

REPEATED EXPOSURE.

HAZARD CLASS	HAZARD CATEGORY
SKIN IRRITATION	2
EYE IRRITATION	2B
SPECIFIC TARGET ORGAN TOXICITY - REPEATED EXPOSURE	2

PICTOGRAM(S)



Precautionary Statements

Prevention: Do not breathe vapors, mist, or spray. Wash affected area thoroughly after handling. Wear

protective gloves.

Response: IF ON SKIN: Wash with plenty of water. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Get medical

attention if you feel unwell. If skin irritation occurs: Get medical attention. If eye irritation

persists: Get medical attention. Take off contaminated clothing.

Storage: Not prescribed

Disposal: Dispose of contents and/or container according to Federal, State/Provincial and local

governmental regulations.

Classification complies with OSHA Hazard Communication Standard (29 CFR 1910.1200) and is consistent with the provisions of the United Nations Globally Harmonized System of Classification and Labeling of Chemicals (GHS).

See Section 11 for additional toxicological information.

3. COMPOSITION / INFORMATION ON INGREDIENTS

Hazardous Component(s)	CAS Number	Percentage*

Oleic acid 5.5EO	9004-96-0	30 - 40
Saccharin	81-07-2	1 - 5
Silica, amorphous, fumed, crystal-free	112945-52-5	1 - 5
Cumene hydroperoxide	80-15-9	1 - 5
Propane-1,2-diol	57-55-6	1 - 5
Cumene	98-82-8	0.1 - 1
Titanium dioxide	13463-67-7	0.1 - 1

^{*} Exact percentages may vary or are trade secret. Concentration range is provided to assist users in providing appropriate protections.

4. FIRST AID MEASURES

Inhalation: Move to fresh air. If not breathing, give artificial respiration. If breathing is

difficult, give oxygen. Get medical attention.

Skin contact: Immediately flush skin with plenty of water (using soap, if available). Remove

contaminated clothing and footwear. Wash clothing before reuse. Get medical

attention.

Eye contact: Rinse immediately with plenty of water, also under the eyelids, for at least 15

minutes. Get medical attention.

Ingestion: DO NOT induce vomiting unless directed to do so by medical personnel.

Never give anything by mouth to an unconscious person. Get medical

attention.

Symptoms: See Section 11.

5. FIRE FIGHTING MEASURES

Extinguishing media: Water spray (fog), foam, dry chemical or carbon dioxide.

Special firefighting procedures: Wear self-contained breathing apparatus and full protective clothing, such as

turn-out gear. In case of fire, keep containers cool with water spray.

Uncontrolled polymerization may occur at high temperatures resulting in

explosions or rupture of storage containers.

Hazardous combustion products: Oxides of carbon. Oxides of sulfur. Oxides of nitrogen. Irritating organic

vapours.

6. ACCIDENTAL RELEASE MEASURES

Use personal protection recommended in Section 8, isolate the hazard area and deny entry to unnecessary and unprotected personnel.

Environmental precautions: Do not allow product to enter sewer or waterways.

Clean-up methods: Remove all sources of ignition. Evacuate and ventilate spill area; dike spill to

prevent entry into water system; wear full protective equipment during cleanup. Soak up with inert absorbent material (e.g. sand, silica gel, acid binder, universal binder, sawdust). Scrape up as much material as possible. Store in a partly filled, closed container until disposal. Refer to Section 8 "Exposure

Controls / Personal Protection" prior to clean up.

7. HANDLING AND STORAGE

Handling: Use only with adequate ventilation. Prevent contact with eyes, skin and

clothing. Do not breathe vapor and mist. Wash thoroughly after handling.

Keep container closed. Refer to Section 8.

Storage: For safe storage, store at or below 38 °C (100.4 °F)

Keep in a cool, well ventilated area away from heat, sparks and open flame.

Keep container tightly closed until ready for use.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Employers should complete an assessment of all workplaces to determine the need for, and selection of, proper exposure controls and protective equipment for each task performed.

Hazardous Component(s)	ACGIH TLV	OSHA PEL	AIHA WEEL	OTHER
Oleic acid 5.5EO	None	None	None	None
Saccharin	None	None	None	None
Silica, amorphous, fumed, crystal-free	10 mg/m3 TWA Inhalable dust. 3 mg/m3 TWA Respirable fraction.	20 MPPCF TWA 0.8 mg/m3 TWA	None	None
Cumene hydroperoxide	None	None	1 ppm (6 mg/m3) TWA (SKIN)	None
Propane-1,2-diol	None	None	10 mg/m3 TWA Aerosol.	None
Cumene	50 ppm TWA	50 ppm (245 mg/m3) PEL (SKIN)	None	None
Titanium dioxide 10 mg/m3 TWA		15 mg/m3 PEL Total dust. 15 MPPCF TWA Respirable fraction. 15 mg/m3 TWA Total dust. 50 MPPCF TWA Total dust. 5 mg/m3 TWA Respirable fraction.	None	None

Engineering controls: Provide adequate local exhaust ventilation to maintain worker exposure below

exposure limits.

Respiratory protection: Use NIOSH approved respirator if there is potential to exceed exposure

limit(s).

Eye/face protection: Safety goggles or safety glasses with side shields. Full face protection should

be used if the potential for splashing or spraying of product exists. Safety

showers and eye wash stations should be available.

Skin protection:Use chemical resistant, impermeable clothing including gloves and either an

apron or body suit to prevent skin contact. Neoprene gloves. Butyl rubber

gloves. Natural rubber gloves.

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical state:LiquidColor:PurpleOdor:MildOdor threshold:Not available.

IDH number: 135333

pH: Not available.
Not applicable

 Vapor pressure:
 < 5 mm hg (27 °C (80.6 °F))</td>

 Boiling point/range:
 > 149 °C (> 300.2 °F)

Melting point/ range:Not available.Specific gravity:1.05

Vapor density: Not available.

Flash point: > 93.3 °C (> 199.94 °F) Tagliabue closed cup

Flammable/Explosive limits - lower:

Flammable/Explosive limits - upper:

Autoignition temperature:

Flammability:

Flammability:

Evaporation rate:

Solubility in water:

Not available.

Not applicable

Not available.

Slight

Partition coefficient (n-octanol/water): Not available.

VOC content: 0.19 %; 1.79 g/l Method 40 CFR Part 63 Appendix A to Subpart PPPP

Viscosity: Not available.

Decomposition temperature: Not available.

10. STABILITY AND REACTIVITY

Stability: Stable under normal conditions of storage and use.

Hazardous reactions: None under normal processing. Polymerization may occur at elevated temperature or in the

presence of incompatible materials.

Hazardous decomposition

products:

IDH number: 135333

Oxides of carbon. Oxides of sulfur. Oxides of nitrogen. Irritating organic vapours.

Incompatible materials: Strong oxidizing agents.

Reactivity: Not available.

Conditions to avoid: Elevated temperatures. Heat, flames, sparks and other sources of ignition. Store away from

incompatible materials.

11. TOXICOLOGICAL INFORMATION

Relevant routes of exposure: Skin, Inhalation, Eyes, Ingestion

Potential Health Effects/Symptoms

Inhalation: Inhalation of vapors or mists of the product may be irritating to the respiratory system.

Skin contact: Causes skin irritation. **Eye contact:** Causes eye irritation.

Ingestion: May cause gastrointestinal tract irritation if swallowed.

Hazardous Component(s)	LD50s and LC50s	Immediate and Delayed Health Effects	
Oleic acid 5.5EO	None	Irritant	
Saccharin	Oral LD50 (Mouse) = 17 g/kg	No Target Organs	
Silica, amorphous, fumed, crystal-free	None	Nuisance dust	
Cumene hydroperoxide	Inhalation LC50 (Mouse, 4 h) = 200 mg/l	Allergen, Central nervous system, Corrosive, Irritant, Mutagen	
Propane-1,2-diol	Oral LD50 (Rabbit) = 18 g/kg Oral LD50 (Mouse) = 23.9 g/kg Oral LD50 (Rat) = 30 g/kg	Irritant	
Cumene	Oral LD50 (Rat) = 2.91 g/kg Oral LD50 (Rat) = 1,400 mg/kg Inhalation LC50 (Rat, 4 h) = 8000 ppm	Central nervous system, Irritant, Lung	
Titanium dioxide	None	Irritant, Respiratory, Some evidence of carcinogenicity	

Hazardous Component(s)	NTP Carcinogen	IARC Carcinogen	OSHA Carcinogen (Specifically Regulated)
Oleic acid 5.5EO	No	No	No
Saccharin	No	No	No
Silica, amorphous, fumed, crystal-free	No	No	No
Cumene hydroperoxide	No	No	No
Propane-1,2-diol	No	No	No
Cumene	Reasonably Anticipated to be a Human Carcinogen.	Group 2B	No
Titanium dioxide	No	Group 2B	No

12. ECOLOGICAL INFORMATION

Ecological information: Not available.

13. DISPOSAL CONSIDERATIONS

Information provided is for unused product only.

Recommended method of disposal: Follow all local, state, federal and provincial regulations for disposal.

Hazardous waste number:Not a RCRA hazardous waste.

14. TRANSPORT INFORMATION

The transport information provided in this section only applies to the material/formulation itself, and is not specific to any package/configuration.

U.S. Department of Transportation Ground (49 CFR)

IDH number: 135333

Proper shipping name: RQ, Environmentally hazardous substance, liquid, n.o.s.

Hazard class or division: 9
Identification number: UN 3082
Packing group: III

DOT Hazardous Substance(s): alpha,alpha-Dimethylbenzylhydroperoxide

International Air Transportation (ICAO/IATA)

Proper shipping name: RQ, Environmentally hazardous substance, liquid, n.o.s.

Hazard class or division: 9
Identification number: UN 3082

Packing group:

Water Transportation (IMO/IMDG)

Proper shipping name: RQ, ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.

Hazard class or division: 9
Identification number: UN 3082
Packing group: |||

Additional information: IMDG-Code: Segregation group 1- Acids

15. REGULATORY INFORMATION

United States Regulatory Information

TSCA 8 (b) Inventory Status: All components are listed or are exempt from listing on the Toxic Substances Control Act

Inventory.

TSCA 12 (b) Export Notification: None above reporting de minimis

CERCLA/SARA Section 302 EHS: None above reporting de minimis. CERCLA/SARA Section 311/312: Immediate Health, Delayed Health

CERCLA/SARA Section 313: This product contains the following toxic chemicals subject to the reporting requirements of

section 313 of the Emergency Planning and Community Right-To-Know Act of 1986 (40

CFR 372). Saccharin (CAS# 81-07-2). Cumene hydroperoxide (CAS# 80-15-9).

CERCLA Reportable quantity: Cumene hydroperoxide (CAS# 80-15-9) 10 lbs. (4.54 kg)

California Proposition 65: This product contains a chemical known in the State of California to cause cancer. This

product contains a chemical known to the State of California to cause birth defects or other

reproductive harm.

Canada Regulatory Information

IDH number: 135333

CEPA DSL/NDSL Status: Contains one or more components listed on the Non-Domestic Substances List. All other

components are listed on or are exempt from listing on the Domestic Substances List. Components listed on the NDSL must be tracked by all Canadian Importers of Record as required by Environment Canada. They may be imported into Canada in limited quantities.

Please contact Regulatory Affairs for additional details.

16. OTHER INFORMATION

This safety data sheet contains changes from the previous version in sections: 2

Prepared by: Product Safety and Regulatory Affairs

Issue date: 01/19/2018

DISCLAIMER: The data contained herein are furnished for information only and are believed to be reliable. However, Henkel Corporation and its affiliates ("Henkel") does not assume responsibility for any results obtained by persons over whose methods Henkel has no control. It is the user's responsibility to determine the suitability of Henkel's products or any production methods mentioned herein for a particular purpose, and to adopt such precautions as may be advisable for the protection of property and persons against any hazards that may be involved in the handling and use of any Henkel's products. In light of the foregoing, Henkel specifically disclaims all warranties, express or implied, including warranties of merchantability and fitness for a particular purpose, arising from sale or use of Henkel's products. Henkel further disclaims any liability for consequential or incidental damages of any kind, including lost profits.



Revision Number: 005.0 Issue date: 10/31/2016

1. PRODUCT AND COMPANY IDENTIFICATION

Product name: LOCTITE SF 7088 KNOWN AS

LOCTITE ANAEROBIC PRIME STK

Product type: Anaerobic
Restriction of Use: None identified

Company address: Henkel Corporation Henkel Way One

Rocky Hill, Connecticut 06067

IDH number: 1069258

Item number: 1069258
Region: United States

Contact information:

Telephone: +1 (860) 571-5100

MEDICAL EMERGENCY Phone: Poison Control Center 1-877-671-4608 (toll free) or 1-303-592-1711 TRANSPORT EMERGENCY Phone: CHEMTREC 1-800-424-9300 (toll free) or 1-703-527-3887

Internet: www.henkelna.com

2. HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW

WARNING: CAUSES SKIN IRRITATION.

MAY CAUSE AN ALLERGIC SKIN REACTION.

CAUSES SERIOUS EYE IRRITATION.

SUSPECTED OF DAMAGING FERTILITY OR THE UNBORN CHILD.

HAZARD CLASS	HAZARD CATEGORY
SKIN IRRITATION	2
EYE IRRITATION	2A
SKIN SENSITIZATION	1
REPRODUCTIVE TOXICITY	2

PICTOGRAM(S)





Precautionary Statements

IDH number: 1069258

Prevention: Obtain special instructions before use. Do not handle until all safety precautions have been

read and understood. Avoid breathing dust or fumes. Wash affected area thoroughly after handling. Contaminated work clothing should not be allowed out of the workplace. Wear

protective gloves, clothing, eye and face protection.

Response: IF ON SKIN: Wash with plenty of water. IF IN EYES: Rinse cautiously with water for several

minutes. Remove contact lenses, if present and easy to do. Continue rinsing. IF exposed or concerned: Get medical attention. If skin irritation or rash occurs: Get medical attention. If eye

irritation persists: Get medical attention. Take off contaminated clothing.

Storage: Store locked up.

Disposal: Dispose of contents and/or container according to Federal, State/Provincial and local

governmental regulations.

Classification complies with OSHA Hazard Communication Standard (29 CFR 1910.1200) and is consistent with the provisions of the United Nations Globally Harmonized System of Classification and Labeling of Chemicals (GHS).

See Section 11 for additional toxicological information.

3. COMPOSITION / INFORMATION ON INGREDIENTS

Hazardous Component(s)	CAS Number	Percentage*
Hydroxyalkyl methacrylate	27813-02-1	60 - 100
2-Ethylhexanoic acid	149-57-5	1 - 5
Methacrylic acid	79-41-4	1 - 5
Amine	Proprietary	0.1 - 1

^{*} Exact percentages may vary or are trade secret. Concentration range is provided to assist users in providing appropriate protections.

4. FIRST AID MEASURES

Inhalation: Move to fresh air. If breathing is difficult, give oxygen. If not breathing, give

artificial respiration. Get medical attention.

Skin contact: Immediately flush skin with plenty of water (using soap, if available). Remove

contaminated clothing and footwear. Wash clothing before reuse. Get medical

attention.

Eye contact: Rinse immediately with plenty of water, also under the eyelids, for at least 15

minutes. Get medical attention.

Ingestion: DO NOT induce vomiting unless directed to do so by medical personnel.

Never give anything by mouth to an unconscious person. Get medical

attention.

Symptoms: See Section 11.

IDH number: 1069258

5. FIRE FIGHTING MEASURES

Extinguishing media: Water spray (fog), foam, dry chemical or carbon dioxide.

Special firefighting procedures: Wear self-contained breathing apparatus and full protective clothing, such as

turn-out gear. In case of fire, keep containers cool with water spray.

Uncontrolled polymerization may occur at high temperatures resulting in

explosions or rupture of storage containers.

Hazardous combustion products: Oxides of carbon. Oxides of nitrogen. Irritating organic vapours.

6. ACCIDENTAL RELEASE MEASURES

Use personal protection recommended in Section 8, isolate the hazard area and deny entry to unnecessary and unprotected personnel.

Environmental precautions: Do not allow product to enter sewer or waterways.

Clean-up methods: Remove all sources of ignition. Evacuate and ventilate spill area; dike spill to

prevent entry into water system; wear full protective equipment during cleanup. Wear appropriate personal protective equipment. Soak up with inert absorbent material (e.g. sand, silica gel, acid binder, universal binder, sawdust). Scrape up as much material as possible. Store in a partly filled, closed container until disposal. Refer to Section 8 "Exposure Controls /

Personal Protection" prior to clean up.

7. HANDLING AND STORAGE

Handling: Use only with adequate ventilation. Prevent contact with eyes, skin and

clothing. Do not breathe vapor and mist. Wash thoroughly after handling.

Keep container closed. Refer to Section 8.

Storage: For safe storage, store at or below 38 °C (100.4 °F)

Keep in a cool, well ventilated area away from heat, sparks and open flame.

Keep container tightly closed until ready for use.

For information on product shelf life contact Henkel Customer Service at (800) 243-4874.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Employers should complete an assessment of all workplaces to determine the need for, and selection of, proper exposure controls and protective equipment for each task performed.

Hazardous Component(s)	ACGIH TLV	OSHA PEL	AIHA WEEL	OTHER
Hydroxyalkyl methacrylate	None	None	None	1 ppm TWA 3 ppm STEL
2-Ethylhexanoic acid	5 mg/m3 TWA Inhalable fraction and vapor.	None	None	None
Methacrylic acid	20 ppm TWA	None	None	None
Amine	None	None	None	None

Engineering controls: Provide adequate local exhaust ventilation to maintain worker exposure below

exposure limits.

Respiratory protection: Use NIOSH approved respirator if there is potential to exceed exposure

limit(s).

Eye/face protection: Safety goggles or safety glasses with side shields. Full face protection should

be used if the potential for splashing or spraying of product exists. Safety

showers and eye wash stations should be available.

Skin protection: Use chemical resistant, impermeable clothing including gloves and either an

apron or body suit to prevent skin contact. Neoprene gloves.

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical state: Solid, Gel
Color: Light blue
Odor: Mild
Odor threshold: Not available.

pH: Not applicable Vapor pressure: Not available. Boiling point/range: Not available. Melting point/ range: Not available. Specific gravity: 1.0357 Vapor density: Not available. Flash point: Product is a solid. Flammable/Explosive limits - lower: Not available. Flammable/Explosive limits - upper: Not available. Autoignition temperature: Not available. Not applicable Flammability: **Evaporation rate:** Not available. Solubility in water: Not available. Partition coefficient (n-octanol/water): Not available. **VOC** content: 2.89 %; 30 g/l Viscosity: Not available. **Decomposition temperature:** Not available.

IDH number: 1069258

Page 3 of 6

10. STABILITY AND REACTIVITY

Stability: Stable under normal conditions of storage and use.

Hazardous reactions: None under normal processing. Polymerization may occur at elevated temperature or in the

presence of incompatible materials.

Hazardous decomposition

products:

IDH number: 1069258

Oxides of carbon. Oxides of nitrogen. Irritating organic vapours.

Incompatible materials: Strong oxidizing agents. Reducing agents. Amines. Peroxides. Free radical initiators.

Reactivity: Not available.

Conditions to avoid: Elevated temperatures. Heat, flames, sparks and other sources of ignition. Store away from

incompatible materials.

11. TOXICOLOGICAL INFORMATION

Relevant routes of exposure: Skin, Inhalation, Eyes, Ingestion

Potential Health Effects/Symptoms

Inhalation: Inhalation of vapors or mists of the product may be irritating to the respiratory system.

Skin contact: Causes skin irritation. May cause allergic skin reaction.

Eye contact: Causes serious eye irritation.

Ingestion: May cause gastrointestinal disturbances.

Hazardous Component(s)	LD50s and LC50s	Immediate and Delayed Health Effects
Hydroxyalkyl methacrylate	None	Irritant, Allergen
2-Ethylhexanoic acid	Oral LD50 (Rat) = 1.6 g/kg Oral LD50 (Rabbit) = 1.3 g/kg Dermal LD50 (Rabbit) = 1,260 mg/kg	Eyes, Irritant, Reproductive
Methacrylic acid	Oral LD50 (Mouse) = 1,332 mg/kg Oral LD50 (Mouse) = 1,600 mg/kg Oral LD50 (Mouse) = 1,250 mg/kg Oral LD50 (Rabbit) = 1,200 mg/kg Oral LD50 (Rat) = 1,060 mg/kg Oral LD50 (Rat) = 2,224 mg/kg Dermal LD50 (Rabbit) = 500 mg/kg Inhalation LC50 (Rat, 4 h) = 7.1 mg/l	Corrosive, Irritant, Allergen
Amine	None	Allergen, Central nervous system, Corrosive, Irritant

Hazardous Component(s)	NTP Carcinogen	IARC Carcinogen	OSHA Carcinogen (Specifically Regulated)
Hydroxyalkyl methacrylate	No	No	No
2-Ethylhexanoic acid	No	No	No
Methacrylic acid	No	No	No
Amine	No	No	No

12. ECOLOGICAL INFORMATION

Ecological information: Not available.

13. DISPOSAL CONSIDERATIONS

Information provided is for unused product only.

Recommended method of disposal: Follow all local, state, federal and provincial regulations for disposal.

Hazardous waste number:Not a RCRA hazardous waste.

14. TRANSPORT INFORMATION

The transport information provided in this section only applies to the material/formulation itself, and is not specific to any package/configuration.

U.S. Department of Transportation Ground (49 CFR)

Proper shipping name:
Hazard class or division:
Identification number:
Packing group:
Not regulated
None
None

International Air Transportation (ICAO/IATA)

Proper shipping name:
Hazard class or division:
Identification number:
Packing group:

Not regulated
None
None

Water Transportation (IMO/IMDG)

Proper shipping name:
Hazard class or division:
Identification number:
Packing group:
Not regulated
None
None

15. REGULATORY INFORMATION

United States Regulatory Information

TSCA 8 (b) Inventory Status: All components are listed or are exempt from listing on the Toxic Substances Control Act

Inventory.

TSCA 12 (b) Export Notification: None above reporting de minimis

CERCLA/SARA Section 302 EHS: None above reporting de minimis.

CERCLA/SARA Section 311/312: Immediate Health, Delayed Health
None above reporting de minimis.

California Proposition 65: This product contains a chemical known in the State of California to cause cancer.

Canada Regulatory Information

IDH number: 1069258

CEPA DSL/NDSL Status: All components are listed on or are exempt from listing on the Canadian Domestic

Substances List.

16. OTHER INFORMATION

This safety data sheet contains changes from the previous version in sections: 2

Prepared by: Sheila Gines, Regulatory Affairs Specialist

Issue date: 10/31/2016

Product name: LOCTITE SF 7088 KNOWN AS LOCTITE ANAEROBIC PRIME STK Page 5 of 6

DISCLAIMER: The data contained herein are furnished for information only and are believed to be reliable. However, Henkel Corporation and its affiliates ("Henkel") does not assume responsibility for any results obtained by persons over whose methods Henkel has no control. It is the user's responsibility to determine the suitability of Henkel's products or any production methods mentioned herein for a particular purpose, and to adopt such precautions as may be advisable for the protection of property and persons against any hazards that may be involved in the handling and use of any Henkel's products. In light of the foregoing, Henkel specifically disclaims all warranties, express or implied, including warranties of merchantability and fitness for a particular purpose, arising from sale or use of Henkel's products. Henkel further disclaims any liability for consequential or incidental damages of any kind, including lost profits.

IDH number: 1069258



Revision Number: 003.1 Issue date: 11/02/2016

1. PRODUCT AND COMPANY IDENTIFICATION

Product name: LOCTITE LB 8070 known as LOCTITE IDH number: 864067

HD AntiSeize 20g stk E

Product type: Lubricant ltem number: 41205
Restriction of Use: None identified Region: United States
Company address: Contact information:

Company address: Henkel Corporation

Henkel Corporation Henkel Way One

Rocky Hill, Connecticut 06067

Telephone: +1 (860) 571-5100

MEDICAL EMERGENCY Phone: Poison Control Center

1-877-671-4608 (toll free) or 1-303-592-1711 TRANSPORT EMERGENCY Phone: CHEMTREC 1-800-424-9300 (toll free) or 1-703-527-3887

Internet: www.henkelna.com

2. HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW

WARNING: CAUSES SKIN IRRITATION.

CAUSES SERIOUS EYE IRRITATION.

HAZARD CLASS	HAZARD CATEGORY
SKIN IRRITATION	2
EYE IRRITATION	2A

PICTOGRAM(S)



Precautionary Statements

Prevention: Wash affected area thoroughly after handling. Wear protective gloves, eye protection, and face

protection.

Response: IF ON SKIN: Wash with plenty of water. IF IN EYES: Rinse cautiously with water for several

minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If skin irritation

occurs: Get medical attention. If eye irritation persists: Get medical attention. Take off

contaminated clothing.
Not prescribed

Storage: Not prescribed **Disposal:** Not prescribed

Classification complies with OSHA Hazard Communication Standard (29 CFR 1910.1200) and is consistent with the provisions of the United Nations Globally Harmonized System of Classification and Labeling of Chemicals (GHS).

See Section 11 for additional toxicological information.

3. COMPOSITION / INFORMATION ON INGREDIENTS

Hazardous Component(s)	CAS Number	Percentage*
Distillates (petroleum), hydrotreated heavy naphthenic	64742-52-5	30 - 40

Petroleum distillates, hydrotreated, light naphthenic	64742-53-6	10 - 20
Calcium fluoride	7789-75-5	10 - 20
Graphite	7782-42-5	10 - 20
Calcium distearate	1592-23-0	1 - 5

^{*} Exact percentages may vary or are trade secret. Concentration range is provided to assist users in providing appropriate protections.

4. FIRST AID MEASURES

Inhalation: Move to fresh air. If not breathing, give artificial respiration. If breathing is

difficult, give oxygen. Get medical attention.

Skin contact: Remove contaminated clothing and footwear. Wash with soap and water. If

symptoms develop and persist, get medical attention. Wash clothing before

reuse.

Eye contact: Immediately flush eyes with plenty of water for at least 15 minutes. Get

medical attention.

Ingestion: Do not induce vomiting. Keep individual calm. Never give anything by mouth

to an unconscious person. Aspiration may cause pulmonary edema and

pneumonitis. Get medical attention.

Symptoms: See Section 11.

5. FIRE FIGHTING MEASURES

Extinguishing media: Water spray (fog), foam, dry chemical or carbon dioxide.

Special firefighting procedures: Wear self-contained breathing apparatus and full protective clothing, such as

turn-out gear. In case of fire, keep containers cool with water spray.

Unusual fire or explosion hazards: Not available.

Hazardous combustion products: Oxides of carbon.

IDH number: 864067

6. ACCIDENTAL RELEASE MEASURES

Use personal protection recommended in Section 8, isolate the hazard area and deny entry to unnecessary and unprotected personnel.

Environmental precautions: Do not allow product to enter sewer or waterways.

Clean-up methods: Ensure adequate ventilation. Scrape up as much material as possible. Clean

residue with soap and water. Store in a closed container until ready for

disposal.

7. HANDLING AND STORAGE

Handling: Prevent contact with eyes, skin and clothing. Do not breathe vapor and mist.

Wash thoroughly after handling. Keep container closed. Refer to Section 8.

Storage: For safe storage, store between 15 °C (59°F) and 49 °C (120.2 °F)

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Employers should complete an assessment of all workplaces to determine the need for, and selection of, proper exposure controls and protective equipment for each task performed.

Hazardous Component(s)	ACGIH TLV	OSHA PEL	AIHA WEEL	OTHER
Distillates (petroleum), hydrotreated heavy naphthenic	5 mg/m3 TWA Inhalable fraction. 5 mg/m3 TWA mist 10 mg/m3 STEL mist	5 mg/m3 TWA mist 500 ppm (2,000 mg/m3) PEL 5 mg/m3 PEL Mist.	None	None
Petroleum distillates, hydrotreated, light naphthenic	5 mg/m3 TWA Inhalable fraction.	5 mg/m3 PEL Mist. 500 ppm (2,000 mg/m3) PEL	None	None
Calcium fluoride	2.5 mg/m3 TWA (as F)	2.5 mg/m3 PEL (as F) 2.5 mg/m3 TWA Dust.	None	None
Graphite	2 mg/m3 TWA Respirable fraction.	5 mg/m3 PEL Respirable fraction. 15 mg/m3 PEL Total dust. 15 MPPCF TWA	None	None
Calcium distearate	10 mg/m3 TWA 3 mg/m3 TWA Respirable fraction.	None	None	None

Engineering controls: Provide adequate local exhaust ventilation to maintain worker exposure below

exposure limits.

Respiratory protection:Use NIOSH approved respirator if there is potential to exceed exposure

limit(s). Observe OSHA regulations for respirator use (29 CFR 1910.134).

Eye/face protection: Safety goggles or safety glasses with side shields. Safety showers and eye

wash stations should be available.

Skin protection:Use impermeable gloves and protective clothing as necessary to prevent skin

contact.

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical state: Solid
Color: Black
Odor: Mild, Petroleum

Odor threshold:
pH:
Not available.
Vapor pressure:
Roiling point/range:
Not available.

Flash point: Not classified as a flammable solid per DOT Classification Guidelines Part 173

Appendix H 7/10/2002.

Flammable/Explosive limits - lower: Not determined Flammable/Explosive limits - upper: Not determined Autoignition temperature: Not determined Flammability: Not applicable **Evaporation rate:** Not determined Solubility in water: Not available. Partition coefficient (n-octanol/water): Not determined **VOC** content: 13.3 %; 157 g/l

VOC content: 13.3 %; 157 g/Viscosity: Not available.

Decomposition temperature: Not available.

IDH number: 864067

10. STABILITY AND REACTIVITY

Stability: Stable under normal conditions of storage and use.

Hazardous reactions: Will not occur.

Hazardous decomposition

products:

IDH number: 864067

Oxides of carbon. Hydrocarbons.

Incompatible materials: Acids. Alkalis.

Reactivity: Not available.

Conditions to avoid: None known

11. TOXICOLOGICAL INFORMATION

Relevant routes of exposure: Skin, Eyes

Potential Health Effects/Symptoms

Inhalation: May cause respiratory tract irritation. This product has low volatility and is not expected to

cause respiratory tract irritation during normal conditions of use.

Skin contact: Causes skin irritation.

Eye contact: Causes serious eye irritation.

Ingestion: Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhea. Principal hazard

of ingestion is aspiration into the lungs and subsequent pneumonitis.

Hazardous Component(s)	LD50s and LC50s	Immediate and Delayed Health Effects
Distillates (petroleum), hydrotreated heavy naphthenic	None	Irritant
Petroleum distillates, hydrotreated, light naphthenic	None	Irritant
Calcium fluoride	Oral LD50 (Rat) = 4,250 mg/kg	Teeth, Muscle, Respiratory
Graphite	None	Lung
Calcium distearate	None	No Target Organs

Hazardous Component(s)	NTP Carcinogen	IARC Carcinogen	OSHA Carcinogen (Specifically Regulated)
Distillates (petroleum), hydrotreated heavy naphthenic	No	No	No
Petroleum distillates, hydrotreated, light naphthenic	No	No	No
Calcium fluoride	No	No	No
Graphite	No	No	No
Calcium distearate	No	No	No

12. ECOLOGICAL INFORMATION

Ecological information: Not available.

13. DISPOSAL CONSIDERATIONS

Information provided is for unused product only.

Recommended method of disposal: Follow all local, state, federal and provincial regulations for disposal.

Hazardous waste number:Not a RCRA hazardous waste.

14. TRANSPORT INFORMATION

The transport information provided in this section only applies to the material/formulation itself, and is not specific to any package/configuration.

U.S. Department of Transportation Ground (49 CFR)

Proper shipping name:
Hazard class or division:
Identification number:
Packing group:
Not regulated
None
None

International Air Transportation (ICAO/IATA)

Proper shipping name:
Hazard class or division:
Identification number:
Packing group:

Not regulated
None
None

Water Transportation (IMO/IMDG)

Proper shipping name: Not regulated Hazard class or division: None Identification number: None Packing group: None

15. REGULATORY INFORMATION

United States Regulatory Information

TSCA 8 (b) Inventory Status: All components are listed or are exempt from listing on the Toxic Substances Control Act

Inventory.

TSCA 12 (b) Export Notification: None above reporting de minimis

CERCLA/SARA Section 302 EHS: None above reporting de minimis.

CERCLA/SARA Section 302 EHS: None above reporting de minimis.

CERCLA/SARA Section 311/312: Immediate Health, Delayed Health None above reporting de minimis.

California Proposition 65: No California Proposition 65 listed chemicals are known to be present.

Canada Regulatory Information

IDH number: 864067

CEPA DSL/NDSL Status: All components are listed on or are exempt from listing on the Canadian Domestic

Substances List.

16. OTHER INFORMATION

This safety data sheet contains changes from the previous version in sections: New Safety Data Sheet format.

Prepared by: Catherine Bimler, Regulatory Affairs Specialist

Issue date: 11/02/2016

DISCLAIMER: The data contained herein are furnished for information only and are believed to be reliable. However, Henkel Corporation and its affiliates ("Henkel") does not assume responsibility for any results obtained by persons over whose methods Henkel has no control. It is the user's responsibility to determine the suitability of Henkel's products or any production methods mentioned herein for a particular purpose, and to adopt such precautions as may be advisable for the protection of property and persons against any hazards that may be involved in the handling and use of any Henkel's products. In light of the foregoing, Henkel specifically disclaims all warranties, express or implied, including warranties of merchantability and fitness for a particular purpose, arising from sale or use of Henkel's products. Henkel further disclaims any liability for consequential or incidental damages of any kind, including lost profits.

IDH number: 864067



Revision Number: 003.0 Issue date: 11/07/2017

1. PRODUCT AND COMPANY IDENTIFICATION

Product name: Quickstix(TM) 248(TM) Threadlocker IDI

Medium Strength

Product type: Anaerobic Adhesive
Restriction of Use: None identified

Company address: Henkel Corporation

Henkel Way One

Rocky Hill, Connecticut 06067

IDH number: 826034

Item number: 37684PR
Region: United States

Contact information:

Telephone: +1 (860) 571-5100

MEDICAL EMERGENCY Phone: Poison Control Center 1-877-671-4608 (toll free) or 1-303-592-1711

TRANSPORT EMERGENCY Phone: CHEMTREC 1-800-424-9300 (toll free) or 1-703-527-3887

Internet: www.henkelna.com

2. HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW

WARNING: CAUSES SKIN IRRITATION.

MAY CAUSE AN ALLERGIC SKIN REACTION.

CAUSES SERIOUS EYE IRRITATION. SUSPECTED OF CAUSING CANCER.

HAZARD CLASS	HAZARD CATEGORY
SKIN IRRITATION	2
EYE IRRITATION	2A
SKIN SENSITIZATION	1
CARCINOGENICITY	2





Precautionary Statements

Prevention: Obtain special instructions before use. Do not handle until all safety precautions have been

read and understood. Avoid breathing dust or fumes. Wash affected area thoroughly after handling. Contaminated work clothing should not be allowed out of the workplace. Wear

protective gloves, clothing, eye and face protection.

Response: IF ON SKIN: Wash with plenty of water. IF IN EYES: Rinse cautiously with water for several

minutes. Remove contact lenses, if present and easy to do. Continue rinsing. IF exposed or concerned: Get medical attention. If skin irritation or rash occurs: Get medical attention. If eye

irritation persists: Get medical attention. Take off contaminated clothing.

Storage: Store locked up.

Disposal: Dispose of contents and/or container according to Federal, State/Provincial and local

governmental regulations.

Classification complies with OSHA Hazard Communication Standard (29 CFR 1910.1200) and is consistent with the provisions of the United Nations Globally Harmonized System of Classification and Labeling of Chemicals (GHS).

See Section 11 for additional toxicological information.

IDH number: 826034 Product name: Quickstix(TM) 248(TM) Threadlocker Medium Strength

Page 1 of 6

3. COMPOSITION / INFORMATION ON INGREDIENTS

Hazardous Component(s)	CAS Number	Percentage*	
Tetramethylene dimethacrylate	2082-81-7	10 - 20	
Rheological additive	Unknown	5 - 10	
Silica, amorphous, fumed, crystal-free	112945-52-5	1 - 5	
N,N'-Ethane-1,2-diylbis(12- hydroxyoctadecan-1-amide)	123-26-2	1 - 5	
Ethene, homopolymer	9002-88-4	1 - 5	
Saccharin	81-07-2	0.1 - 1	
Cumene hydroperoxide	80-15-9	0.1 - 1	
1-Acetyl-2-phenylhydrazine	114-83-0	0.1 - 1	
Cumene	98-82-8	0.1 - 1	

^{*} Exact percentages may vary or are trade secret. Concentration range is provided to assist users in providing appropriate protections.

4. FIRST AID MEASURES

Inhalation: Move to fresh air. If not breathing, give artificial respiration. If breathing is

difficult, give oxygen. Get medical attention.

Skin contact: Immediately flush skin with plenty of water (using soap, if available). Remove

contaminated clothing and footwear. Wash clothing before reuse. Get medical

attention.

Eye contact: Rinse immediately with plenty of water, also under the eyelids, for at least 15

minutes. Get medical attention.

Ingestion: DO NOT induce vomiting unless directed to do so by medical personnel.

Never give anything by mouth to an unconscious person. Get medical

attention.

Symptoms: See Section 11.

IDH number: 826034

5. FIRE FIGHTING MEASURES

Extinguishing media: Water spray (fog), foam, dry chemical or carbon dioxide.

Special firefighting procedures: Wear self-contained breathing apparatus and full protective clothing, such as

turn-out gear. In case of fire, keep containers cool with water spray.

Uncontrolled polymerization may occur at high temperatures resulting in

explosions or rupture of storage containers.

Hazardous combustion products: Oxides of nitrogen. Oxides of carbon. Irritating organic vapours.

6. ACCIDENTAL RELEASE MEASURES

Use personal protection recommended in Section 8, isolate the hazard area and deny entry to unnecessary and unprotected personnel.

Environmental precautions: Do not allow product to enter sewer or waterways.

Clean-up methods: Remove all sources of ignition. Evacuate and ventilate spill area; dike spill to

prevent entry into water system; wear full protective equipment during cleanup. Soak up with inert absorbent material (e.g. sand, silica gel, acid binder, universal binder, sawdust). Scrape up as much material as possible. Store in a partly filled, closed container until disposal. Refer to Section 8 "Exposure

Controls / Personal Protection" prior to clean up.

Product name: Quickstix(TM) 248(TM) Threadlocker Medium Strength Page 2 of 6

7. HANDLING AND STORAGE

Handling: Use only with adequate ventilation. Prevent contact with eyes, skin and

clothing. Do not breathe vapor and mist. Wash thoroughly after handling.

Keep container closed. Refer to Section 8.

Storage: For safe storage, store at or below 38 °C (100.4 °F)

Keep in a cool, well ventilated area away from heat, sparks and open flame.

Keep container tightly closed until ready for use.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Employers should complete an assessment of all workplaces to determine the need for, and selection of, proper exposure controls and protective equipment for each task performed.

Hazardous Component(s)	ACGIH TLV	OSHA PEL	AIHA WEEL	OTHER
Tetramethylene dimethacrylate	None	None	None	None
Rheological additive	10 mg/m3 TWA Total dust. 3 mg/m3 TWA Respirable fraction.	15 mg/m3 TWA Total dust. 5 mg/m3 TWA Respirable fraction.	None	None
Silica, amorphous, fumed, crystal-free	10 mg/m3 TWA Inhalable dust. 3 mg/m3 TWA Respirable fraction.	20 MPPCF TWA 0.8 mg/m3 TWA	None	None
N,N'-Ethane-1,2-diylbis(12- hydroxyoctadecan-1-amide)	None	None	None	None
Ethene, homopolymer	10 mg/m3 TWA Inhalable particles. 3 mg/m3 TWA Respirable particles.	15 MPPCF TWA Respirable fraction. 15 mg/m3 TWA Total dust. 50 MPPCF TWA Total dust. 5 mg/m3 TWA Respirable fraction. 5 mg/m3 PEL Respirable fraction. 15 mg/m3 PEL Total dust.	None	None
Saccharin	None	None	None	None
Cumene hydroperoxide	None	None	1 ppm (6 mg/m3) TWA (SKIN)	None
1-Acetyl-2-phenylhydrazine	None	None	None	None
Cumene	50 ppm TWA	50 ppm (245 mg/m3) PEL (SKIN)	None	None

Engineering controls: Provide adequate local exhaust ventilation to maintain worker exposure below

exposure limits.

Respiratory protection: Use NIOSH approved respirator if there is potential to exceed exposure

mit(s).

IDH number: 826034

Eye/face protection: Safety goggles or safety glasses with side shields. Full face protection should

be used if the potential for splashing or spraying of product exists. Safety

showers and eye wash stations should be available.

Skin protection:Use chemical resistant, impermeable clothing including gloves and either an

apron or body suit to prevent skin contact. Neoprene gloves. Nitrile gloves.

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical state: Solid, Paste Color: Blue

Odor: Characteristic
Odor threshold: Not available.
pH: Not applicable

Vapor pressure: < 5 mm hg (80 °F (26.7 °C))

Boiling point/range: > 300 °F (> 148.9 °C)None

Melting point/ range:
Specific gravity:

Not available.
1.1

Vapor density: Not available. Flash point: Product is a solid. Flammable/Explosive limits - lower: Not available. Flammable/Explosive limits - upper: Not available. Autoignition temperature: Not available. Flammability: Not applicable Evaporation rate: Not available. Solubility in water: Slight

Partition coefficient (n-octanol/water):

VOC content:

Viscosity:

Decomposition temperature:

Not available.

Not available.

Not available.

10. STABILITY AND REACTIVITY

Stability: Stable under normal conditions of storage and use.

Hazardous reactions: None under normal processing. Polymerization may occur at elevated temperature or in the

presence of incompatible materials.

Hazardous decomposition

products:

IDH number: 826034

Oxides of nitrogen. Oxides of carbon. Irritating organic vapours.

Incompatible materials: Strong oxidizing agents.

Reactivity: Not available.

Conditions to avoid: Elevated temperatures. Heat, flames, sparks and other sources of ignition. Store away from

incompatible materials.

11. TOXICOLOGICAL INFORMATION

Relevant routes of exposure: Skin, Inhalation, Eyes, Ingestion

Product name: Quickstix(TM) 248(TM) Threadlocker Medium Strength Page 4 of 6

Potential Health Effects/Symptoms

Inhalation: Inhalation of vapors or mists of the product may be irritating to the respiratory system.

Skin contact: Causes skin irritation. May cause allergic skin reaction.

Eye contact: Causes serious eye irritation.

Ingestion: May cause gastrointestinal tract irritation if swallowed.

Hazardous Component(s)	LD50s and LC50s	Immediate and Delayed Health Effects
Tetramethylene dimethacrylate	None	Irritant, Allergen
Rheological additive	None	No Data
Silica, amorphous, fumed, crystal-free	None	Nuisance dust
N,N'-Ethane-1,2-diylbis(12- hydroxyoctadecan-1-amide)	None	No Data
Ethene, homopolymer	None	No Target Organs
Saccharin	Oral LD50 (Mouse) = 17 g/kg	No Target Organs
Cumene hydroperoxide	Inhalation LC50 (Mouse, 4 h) = 200 mg/l	Allergen, Central nervous system, Corrosive, Irritant, Mutagen
1-Acetyl-2-phenylhydrazine	Oral LD50 (Mouse) = 270 mg/kg	Allergen, Blood, Kidney, Mutagen, Some evidence of carcinogenicity
Cumene	Oral LD50 (Rat) = 2.91 g/kg Oral LD50 (Rat) = 1,400 mg/kg Inhalation LC50 (Rat, 4 h) = 8000 ppm	Central nervous system, Irritant, Lung

Hazardous Component(s)	NTP Carcinogen	IARC Carcinogen	OSHA Carcinogen	
			(Specifically Regulated)	
Tetramethylene dimethacrylate	No	No	No	
Rheological additive	No	No	No	
Silica, amorphous, fumed, crystal-free	No	No	No	
N,N'-Ethane-1,2-diylbis(12-	No	No	No	
hydroxyoctadecan-1-amide)	INO	INO	INO	
Ethene, homopolymer	No	No	No	
Saccharin	No	No	No	
Cumene hydroperoxide	No	No	No	
1-Acetyl-2-phenylhydrazine	No	No	No	
Cumene	Reasonably Anticipated to be a Human Carcinogen.	Group 2B	No	

12. ECOLOGICAL INFORMATION

Ecological information: Not available.

13. DISPOSAL CONSIDERATIONS

Information provided is for unused product only.

Recommended method of disposal: Follow all local, state, federal and provincial regulations for disposal.

Hazardous waste number:Not a RCRA hazardous waste.

14. TRANSPORT INFORMATION

The transport information provided in this section only applies to the material/formulation itself, and is not specific to any package/configuration.

U.S. Department of Transportation Ground (49 CFR)

Proper shipping name: RQ, Environmentally hazardous substance, solid, n.o.s.

Hazard class or division: 9

Identification number: UN 3077
Packing group: III

DOT Hazardous Substance(s): alpha,alpha-Dimethylbenzylhydroperoxide

IDH number: 826034 Product name: Quickstix(TM) 248(TM) Threadlocker Medium Strength Page 5 of 6

International Air Transportation (ICAO/IATA)

Proper shipping name: RQ, Environmentally hazardous substance, solid, n.o.s.

Hazard class or division: 9
Identification number: UN 3077
Packing group: III

Water Transportation (IMO/IMDG)

Proper shipping name: RQ, ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S.

Hazard class or division: 9
Identification number: UN 3077
Packing group: |||

15. REGULATORY INFORMATION

United States Regulatory Information

TSCA 8 (b) Inventory Status: All components are listed or are exempt from listing on the Toxic Substances Control Act

Inventory.

TSCA 12 (b) Export Notification: None above reporting de minimis

CERCLA/SARA Section 302 EHS:
CERCLA/SARA Section 311/312:
CERCLA/SARA Section 313:

None above reporting de minimis.
Immediate Health, Delayed Health
None above reporting de minimis.

CERCLA Reportable quantity: Cumene hydroperoxide (CAS# 80-15-9) 10 lbs. (4.54 kg)

California Proposition 65: This product contains a chemical known in the State of California to cause cancer. This

product contains a chemical known to the State of California to cause birth defects or other

reproductive harm.

Canada Regulatory Information

IDH number: 826034

CEPA DSL/NDSL Status: Contains one or more components listed on the Non-Domestic Substances List. All other

components are listed on or are exempt from listing on the Domestic Substances List. Components listed on the NDSL must be tracked by all Canadian Importers of Record as required by Environment Canada. They may be imported into Canada in limited quantities.

Please contact Regulatory Affairs for additional details.

16. OTHER INFORMATION

This safety data sheet contains changes from the previous version in sections: 2

Prepared by: Product Safety and Regulatory Affairs

Issue date: 11/07/2017

DISCLAIMER: The data contained herein are furnished for information only and are believed to be reliable. However, Henkel Corporation and its affiliates ("Henkel") does not assume responsibility for any results obtained by persons over whose methods Henkel has no control. It is the user's responsibility to determine the suitability of Henkel's products or any production methods mentioned herein for a particular purpose, and to adopt such precautions as may be advisable for the protection of property and persons against any hazards that may be involved in the handling and use of any Henkel's products. In light of the foregoing, Henkel specifically disclaims all warranties, express or implied, including warranties of merchantability and fitness for a particular purpose, arising from sale or use of Henkel's products. Henkel further disclaims any liability for consequential or incidental damages of any kind, including lost profits.



Revision Number: 008.0 Issue date: 01/10/2018

1. PRODUCT AND COMPANY IDENTIFICATION

Product name: LOCTITE® 290™ THREADLOCKER IDH number: 233731

e WICKING GRADE

Product type: Anaerobic Sealant Item number: 29021 Restriction of Use: None identified Region: **United States Contact information:**

Company address: Henkel Corporation

Henkel Way One

Rocky Hill, Connecticut 06067

Telephone: +1 (860) 571-5100

MEDICAL EMERGENCY Phone: Poison Control Center 1-877-671-4608 (toll free) or 1-303-592-1711

TRANSPORT EMERGENCY Phone: CHEMTREC 1-800-424-9300 (toll free) or 1-703-527-3887

Internet: www.henkelna.com

2. HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW

WARNING: CAUSES SKIN AND EYE IRRITATION.

MAY CAUSE AN ALLERGIC SKIN REACTION.

MAY CAUSE DAMAGE TO ORGANS THROUGH PROLONGED OR

REPEATED EXPOSURE.

HAZARD CLASS	HAZARD CATEGORY
SKIN IRRITATION	2
EYE IRRITATION	2B
SKIN SENSITIZATION	1
SPECIFIC TARGET ORGAN TOXICITY - REPEATED EXPOSURE	2

PICTOGRAM(S)



Precautionary Statements

IDH number: 233731

Prevention: Do not breathe vapors, mist, or spray. Wash affected area thoroughly after handling.

Contaminated work clothing should not be allowed out of the workplace. Wear protective

Response: IF ON SKIN: Wash with plenty of water. IF IN EYES: Rinse cautiously with water for several

minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Get medical attention if you feel unwell. If skin irritation or rash occurs: Get medical attention. If eye irritation

persists: Get medical attention. Take off contaminated clothing.

Storage: Not prescribed

Disposal: Dispose of contents and/or container according to Federal, State/Provincial and local

governmental regulations.

Classification complies with OSHA Hazard Communication Standard (29 CFR 1910.1200) and is consistent with the provisions of the United Nations Globally Harmonized System of Classification and Labeling of Chemicals (GHS).

See Section 11 for additional toxicological information.

3. COMPOSITION / INFORMATION ON INGREDIENTS

Hazardous Component(s)	CAS Number	Percentage*
Cumene hydroperoxide	80-15-9	1 - 5
Saccharin	81-07-2	1 - 5
Cumene	98-82-8	0.1 - 1
Methyl methacrylate	80-62-6	0.1 - 1

^{*} Exact percentages may vary or are trade secret. Concentration range is provided to assist users in providing appropriate protections.

4. FIRST AID MEASURES

Inhalation: Move to fresh air. If breathing is difficult, give oxygen. If not breathing, give

artificial respiration. Get medical attention.

Skin contact: Immediately flush skin with plenty of water (using soap, if available). Remove

contaminated clothing and footwear. Wash clothing before reuse. Get medical

attention.

Eye contact: Rinse immediately with plenty of water, also under the eyelids, for at least 15

minutes. Get medical attention.

Ingestion: DO NOT induce vomiting unless directed to do so by medical personnel.

Never give anything by mouth to an unconscious person. Get medical

attention.

Symptoms: See Section 11.

5. FIRE FIGHTING MEASURES

Extinguishing media: Water spray (fog), foam, dry chemical or carbon dioxide.

Special firefighting procedures: Wear self-contained breathing apparatus and full protective clothing, such as

turn-out gear. In case of fire, keep containers cool with water spray.

Uncontrolled polymerization may occur at high temperatures resulting in

explosions or rupture of storage containers.

Hazardous combustion products: Oxides of carbon. Oxides of sulfur. Oxides of nitrogen. Irritating organic

vapours.

6. ACCIDENTAL RELEASE MEASURES

Use personal protection recommended in Section 8, isolate the hazard area and deny entry to unnecessary and unprotected personnel.

Environmental precautions: Do not allow product to enter sewer or waterways.

Clean-up methods: Remove all sources of ignition. Evacuate and ventilate spill area; dike spill to

prevent entry into water system; wear full protective equipment during cleanup. Soak up with inert absorbent material (e.g. sand, silica gel, acid binder, universal binder, sawdust). Scrape up as much material as possible. Store in a partly filled, closed container until disposal. Refer to Section 8 "Exposure

Controls / Personal Protection" prior to clean up.

IDH number: 233731 Product name: LOCTITE® 290™ THREADLOCKER e WICKING GRADE

7. HANDLING AND STORAGE

Handling: Use only with adequate ventilation. Prevent contact with eyes, skin and

clothing. Do not breathe vapor and mist. Wash thoroughly after handling.

Keep container closed. Refer to Section 8.

For safe storage, store at or below 38 °C (100.4 °F) Storage:

Keep in a cool, well ventilated area away from heat, sparks and open flame.

Keep container tightly closed until ready for use.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Employers should complete an assessment of all workplaces to determine the need for, and selection of, proper exposure controls and protective equipment for each task performed.

Hazardous Component(s)	ACGIH TLV	OSHA PEL	AIHA WEEL	OTHER
Cumene hydroperoxide	None	None	1 ppm (6 mg/m3) TWA (SKIN)	None
Saccharin	None	None	None	None
Cumene	50 ppm TWA	50 ppm (245 mg/m3) PEL (SKIN)	None	None
Methyl methacrylate	50 ppm TWA 100 ppm STEL (Dermal sensitization)	100 ppm (410 mg/m3) PEL	None	50 ppm

Provide adequate local exhaust ventilation to maintain worker exposure below **Engineering controls:**

exposure limits.

Respiratory protection: Use NIOSH approved respirator if there is potential to exceed exposure

limit(s).

Eye/face protection: Safety goggles or safety glasses with side shields. Full face protection should

be used if the potential for splashing or spraying of product exists. Safety

showers and eye wash stations should be available.

Skin protection: Use chemical resistant, impermeable clothing including gloves and either an

apron or body suit to prevent skin contact. Neoprene gloves.

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical state: Liquid Color: Green Odor: Mild Odor threshold: Not available. pH: Not applicable

. Vapor pressure: < 5 mm hg (27.0 °C (80.6 °F))

Boiling point/range: > 149.0 °C (> 300.2 °F)

Melting point/ range: Not available.

Specific gravity: 1.07 at 26.70 °C (80.06 °F)

Vapor density: Not available.

Flash point: > 93.3 °C (> 199.94 °F) Tagliabue closed cup

Flammable/Explosive limits - lower: Not available. Flammable/Explosive limits - upper: Not available. Autoignition temperature: Not available. Flammability: Not applicable Evaporation rate: Not available. Solubility in water: Slight Partition coefficient (n-octanol/water): Not available.

VOC content: 2.27 %; 22.1 g/l Viscosity: Not available. **Decomposition temperature:** Not available.

10. STABILITY AND REACTIVITY

Stability: Stable under normal conditions of storage and use.

Hazardous reactions: None under normal processing. Polymerization may occur at elevated temperature or in the

presence of incompatible materials.

Hazardous decomposition

products:

IDH number: 233731

Oxides of carbon. Oxides of sulfur. Oxides of nitrogen. Irritating organic vapours. Phenolics.

Incompatible materials: Copper. Iron. Rust. Aluminum. Zinc. Strong oxidizing agents. Reducing agents. Oxygen

scavengers. Strong acids. Strong alkalis.

Reactivity: Not available.

Conditions to avoid: Elevated temperatures. Heat, flames, sparks and other sources of ignition. Store away from

incompatible materials.

11. TOXICOLOGICAL INFORMATION

Relevant routes of exposure: Skin, Inhalation, Eyes, Ingestion

Potential Health Effects/Symptoms

Inhalation: Inhalation of vapors or mists of the product may be irritating to the respiratory system.

Skin contact: Causes skin irritation. May cause allergic skin reaction.

Eye contact: Causes eye irritation.

Ingestion: May cause gastrointestinal tract irritation if swallowed.

Hazardous Component(s)	LD50s and LC50s	Immediate and Delayed Health Effects
Cumene hydroperoxide	Inhalation LC50 (Mouse, 4 h) = 200 mg/l	Allergen, Central nervous system, Corrosive, Irritant, Mutagen
Saccharin	Oral LD50 (Mouse) = 17 g/kg	No Target Organs
Cumene	Oral LD50 (Rat) = 2.91 g/kg Oral LD50 (Rat) = 1,400 mg/kg Inhalation LC50 (Rat, 4 h) = 8000 ppm	Central nervous system, Irritant, Lung
Methyl methacrylate	Oral LD50 (Rat) = 7,800 mg/kg Oral LD50 (Rabbit) = 6,000 mg/kg Oral LD50 (Rat) = 9,400 mg/kg	Allergen, Irritant, Kidney, Liver, Mutagen, Nervous System, Respiratory

Hazardous Component(s)	NTP Carcinogen	IARC Carcinogen	OSHA Carcinogen
The second component (c)	i i i i i i i i i i i i i i i i i i i		(Specifically Regulated)
Cumene hydroperoxide	No	No	No
Saccharin	No	No	No
Cumene	Reasonably Anticipated to be a Human Carcinogen.	Group 2B	No
Methyl methacrylate	No	No	No

12. ECOLOGICAL INFORMATION

Ecological information: Do not empty into drains, soil or bodies of water.

13. DISPOSAL CONSIDERATIONS

Information provided is for unused product only.

Recommended method of disposal: Follow all local, state, federal and provincial regulations for disposal.

Hazardous waste number:Not a RCRA hazardous waste.

14. TRANSPORT INFORMATION

The transport information provided in this section only applies to the material/formulation itself, and is not specific to any package/configuration.

U.S. Department of Transportation Ground (49 CFR)

Proper shipping name: RQ, Environmentally hazardous substance, liquid, n.o.s.

Hazard class or division: 9
Identification number: UN 3082

Packing group:

DOT Hazardous Substance(s): alpha,alpha-Dimethylbenzylhydroperoxide

International Air Transportation (ICAO/IATA)

Proper shipping name: RQ, Environmentally hazardous substance, liquid, n.o.s.

Hazard class or division: 9
Identification number: UN 3082
Packing group: III

Water Transportation (IMO/IMDG)

Proper shipping name: RQ, ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.

Hazard class or division: 9
Identification number: UN 3082
Packing group: III

15. REGULATORY INFORMATION

United States Regulatory Information

TSCA 8 (b) Inventory Status: All components are listed or are exempt from listing on the Toxic Substances Control Act

Inventory.

TSCA 12 (b) Export Notification: None above reporting de minimis

CERCLA/SARA Section 302 EHS: None above reporting de minimis. CERCLA/SARA Section 311/312: Immediate Health, Delayed Health

CERCLA/SARA Section 313: This product contains the following toxic chemicals subject to the reporting requirements of

section 313 of the Emergency Planning and Community Right-To-Know Act of 1986 (40

CFR 372). Cumene hydroperoxide (CAS# 80-15-9). Saccharin (CAS# 81-07-2).

CERCLA Reportable quantity: Cumene hydroperoxide (CAS# 80-15-9) 10 lbs. (4.54 kg)

California Proposition 65: This product contains a chemical known in the State of California to cause cancer.

Canada Regulatory Information

IDH number: 233731

CEPA DSL/NDSL Status: Contains one or more components listed on the Non-Domestic Substances List. All other

components are listed on or are exempt from listing on the Domestic Substances List. Components listed on the NDSL must be tracked by all Canadian Importers of Record as required by Environment Canada. They may be imported into Canada in limited quantities.

Please contact Regulatory Affairs for additional details.

16. OTHER INFORMATION

This safety data sheet contains changes from the previous version in sections: 3

Prepared by: Product Safety and Regulatory Affairs

Issue date: 01/10/2018

IDH number: 233731

DISCLAIMER: The data contained herein are furnished for information only and are believed to be reliable. However, Henkel Corporation and its affiliates ("Henkel") does not assume responsibility for any results obtained by persons over whose methods Henkel has no control. It is the user's responsibility to determine the suitability of Henkel's products or any production methods mentioned herein for a particular purpose, and to adopt such precautions as may be advisable for the protection of property and persons against any hazards that may be involved in the handling and use of any Henkel's products. In light of the foregoing, Henkel specifically disclaims all warranties, express or implied, including warranties of merchantability and fitness for a particular purpose, arising from sale or use of Henkel's products. Henkel further disclaims any liability for consequential or incidental damages of any kind, including lost profits.

Product name: LOCTITE® 290™ THREADLOCKER e WIC



Revision Number: 008.0 Issue date: 11/02/2017

1. PRODUCT AND COMPANY IDENTIFICATION

LOCTITE® 263™ THREADLOCKER **Product name:** IDH number: 1330583 Product type: Anaerobic Sealant Item number: 1330583

Restriction of Use: None identified Company address: Henkel Corporation

Henkel Way One

Rocky Hill, Connecticut 06067

Region: **United States** Contact information: Telephone: +1 (860) 571-5100

MEDICAL EMERGENCY Phone: Poison Control Center 1-877-671-4608 (toll free) or 1-303-592-1711 TRANSPORT EMERGENCY Phone: CHEMTREC

1-800-424-9300 (toll free) or 1-703-527-3887 Internet: www.henkelna.com

2. HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW

WARNING: CAUSES SKIN IRRITATION.

MAY CAUSE AN ALLERGIC SKIN REACTION.

CAUSES SERIOUS EYE IRRITATION. SUSPECTED OF CAUSING CANCER.

MAY CAUSE DAMAGE TO ORGANS THROUGH PROLONGED OR

REPEATED EXPOSURE.

HAZARD CLASS	HAZARD CATEGORY
SKIN IRRITATION	2
EYE IRRITATION	2A
SKIN SENSITIZATION	1
CARCINOGENICITY	2
SPECIFIC TARGET ORGAN TOXICITY - REPEATED EXPOSURE	2





Precautionary Statements

Prevention: Obtain special instructions before use. Do not handle until all safety precautions have been

read and understood. Do not breathe vapors, mist, or spray. Wash affected area thoroughly after handling. Contaminated work clothing should not be allowed out of the workplace. Wear

protective gloves, clothing, eye and face protection.

IF ON SKIN: Wash with plenty of water. IF IN EYES: Rinse cautiously with water for several Response:

minutes. Remove contact lenses, if present and easy to do. Continue rinsing. IF exposed or concerned: Get medical attention. If skin irritation or rash occurs: Get medical attention. If eve

irritation persists: Get medical attention. Take off contaminated clothing.

Storage: Store locked up.

Disposal: Dispose of contents and/or container according to Federal, State/Provincial and local

governmental regulations.

Classification complies with OSHA Hazard Communication Standard (29 CFR 1910.1200) and is consistent with the provisions of the United Nations Globally Harmonized System of Classification and Labeling of Chemicals (GHS).

IDH number: 1330583 Product name: LOCTITE® 263™ THREADLOCKER

3. COMPOSITION / INFORMATION ON INGREDIENTS

Hazardous Component(s)	CAS Number	Percentage*	
3,3,5 Trimethylcyclohexyl methacrylate	7779-31-9	20 - 30	
Methacrylic acid, monoester with 1,2- propanediol, polymer with 4,4'- methylenediphenyl diisocyanate	190208-19-6	10 - 20	
Polyglycol dimethacrylate	109-16-0	5 - 10	
Cumene hydroperoxide	80-15-9	1 - 5	
1-Acetyl-2-phenylhydrazine	114-83-0	0.1 - 1	
Cumene	98-82-8	0.1 - 1	

^{*} Exact percentages may vary or are trade secret. Concentration range is provided to assist users in providing appropriate protections.

4. FIRST AID MEASURES

Inhalation: Move to fresh air. If breathing is difficult, give oxygen. If not breathing, give

artificial respiration. Get medical attention.

Skin contact: Immediately flush skin with plenty of water (using soap, if available). Remove

contaminated clothing and footwear. Wash clothing before reuse. Get medical

attention.

Eye contact: Rinse immediately with plenty of water, also under the eyelids, for at least 15

minutes. Get medical attention.

Ingestion: DO NOT induce vomiting unless directed to do so by medical personnel.

Never give anything by mouth to an unconscious person. Get medical

attention.

Symptoms: See Section 11.

5. FIRE FIGHTING MEASURES

Extinguishing media: Water spray (fog), foam, dry chemical or carbon dioxide.

Special firefighting procedures: Wear self-contained breathing apparatus and full protective clothing, such as

turn-out gear. In case of fire, keep containers cool with water spray.

Uncontrolled polymerization may occur at high temperatures resulting in

explosions or rupture of storage containers.

Hazardous combustion products: Oxides of carbon. Oxides of nitrogen. Thermal decomposition can lead to

release of irritating gases and vapors.

6. ACCIDENTAL RELEASE MEASURES

Use personal protection recommended in Section 8, isolate the hazard area and deny entry to unnecessary and unprotected personnel.

Environmental precautions: Do not allow product to enter sewer or waterways.

Clean-up methods: Remove all sources of ignition. Evacuate and ventilate spill area: dike spill to

prevent entry into water system; wear full protective equipment during cleanup. Soak up with inert absorbent material (e.g. sand, silica gel, acid binder, universal binder, sawdust). Scrape up as much material as possible. Store in a partly filled, closed container until disposal, Refer to Section 8 "Exposure

Controls / Personal Protection" prior to clean up.

HANDLING AND STORAGE

Handling: Use only with adequate ventilation. Prevent contact with eyes, skin and

clothing. Do not breathe vapor and mist. Wash thoroughly after handling.

Keep container closed. Refer to Section 8.

For safe storage, store at or below 38 °C (100.4 °F) Storage:

Keep in a cool, well ventilated area away from heat, sparks and open flame.

Keep container tightly closed until ready for use.

EXPOSURE CONTROLS / PERSONAL PROTECTION

Employers should complete an assessment of all workplaces to determine the need for, and selection of, proper exposure controls and protective equipment for each task performed.

Hazardous Component(s)	ACGIH TLV	OSHA PEL	AIHA WEEL	OTHER
3,3,5 Trimethylcyclohexyl methacrylate	None	None	None	None
Methacrylic acid, monoester with 1,2- propanediol, polymer with 4,4'- methylenediphenyl diisocyanate	None	None	None	None
Polyglycol dimethacrylate	None	None	None	None
Cumene hydroperoxide	None	None	1 ppm (6 mg/m3) TWA (SKIN)	None
1-Acetyl-2-phenylhydrazine	None	None	None	None
Cumene	50 ppm TWA	50 ppm (245 mg/m3) PEL (SKIN)	None	None

Engineering controls: Provide adequate local exhaust ventilation to maintain worker exposure below

exposure limits.

Use NIOSH approved respirator if there is potential to exceed exposure Respiratory protection:

limit(s).

Eye/face protection: Safety goggles or safety glasses with side shields. Full face protection should

be used if the potential for splashing or spraying of product exists. Safety

showers and eye wash stations should be available.

Use chemical resistant, impermeable clothing including gloves and either an Skin protection:

apron or body suit to prevent skin contact. Neoprene gloves.

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical state: Liquid Color: Red

Odor: Characteristic Odor threshold: Not available. pH: Not available. Vapor pressure: Not available. Boiling point/range: Not available. Melting point/ range: Not available. Specific gravity: 1.08 at 20 °C (68°F)

Vapor density: Not available.

100 °C (212°F); Estimated Flash point:

Flammable/Explosive limits - lower: Not available.

IDH number: 1330583 Product name: LOCTITE® 263™ THREADLOCKER Flammable/Explosive limits - upper: Not available. Autoignition temperature: Not available. Flammability Not applicable Evaporation rate: Not available. Solubility in water: Sliaht Partition coefficient (n-octanol/water): Not available. **VOC** content: 0.36 % Not available. Viscosity: **Decomposition temperature:** Not available.

10. STABILITY AND REACTIVITY

Stability: Stable under normal conditions of storage and use.

Hazardous reactions: None under normal processing. Polymerization may occur at elevated temperature or in the

presence of incompatible materials.

Hazardous decomposition

products:

IDH number: 1330583

Oxides of carbon. Oxides of nitrogen. Irritating organic vapours.

Incompatible materials: Strong oxidizing agents. Reducing agents. Strong acids and strong bases. Oxygen

scavengers. Other polymerization initiators. Heavy metals.

Reactivity: Not available.

Conditions to avoid: Elevated temperatures. Heat, flames, sparks and other sources of ignition. Store away from

incompatible materials.

11. TOXICOLOGICAL INFORMATION

Relevant routes of exposure: Skin, Inhalation, Eyes, Ingestion

Potential Health Effects/Symptoms

Inhalation: Inhalation of vapors or mists of the product may be irritating to the respiratory system.

Skin contact: Causes skin irritation. May cause allergic skin reaction.

Eye contact: Causes serious eye irritation.

Ingestion: May cause gastrointestinal tract irritation if swallowed.

Hazardous Component(s)	LD50s and LC50s	Immediate and Delayed Health Effects	
3,3,5 Trimethylcyclohexyl methacrylate	None	No Records	
Methacrylic acid, monoester with 1,2- propanediol, polymer with 4,4'- methylenediphenyl diisocyanate	None	Irritant, Allergen	
Polyglycol dimethacrylate	None	Irritant, Allergen	
Cumene hydroperoxide	Inhalation LC50 (Mouse, 4 h) = 200 mg/l	Allergen, Central nervous system, Corrosive, Irritant, Mutagen	
1-Acetyl-2-phenylhydrazine	Oral LD50 (Mouse) = 270 mg/kg	Allergen, Blood, Kidney, Mutagen, Some evidence of carcinogenicity	
Cumene	Oral LD50 (Rat) = 2.91 g/kg Oral LD50 (Rat) = 1,400 mg/kg Inhalation LC50 (Rat, 4 h) = 8000 ppm	Central nervous system, Irritant, Lung	

Hazardous Component(s)	NTP Carcinogen	IARC Carcinogen	OSHA Carcinogen (Specifically Regulated)
3,3,5 Trimethylcyclohexyl methacrylate	No	No	No
Methacrylic acid, monoester with 1,2- propanediol, polymer with 4,4'- methylenediphenyl diisocyanate	No	No	No
Polyglycol dimethacrylate	No	No	No
Cumene hydroperoxide	No	No	No
1-Acetyl-2-phenylhydrazine	No	No	No
Cumene	Reasonably Anticipated to be a Human Carcinogen.	Group 2B	No

12. ECOLOGICAL INFORMATION

Ecological information: Not available.

13. DISPOSAL CONSIDERATIONS

Information provided is for unused product only.

Recommended method of disposal: Follow all local, state, federal and provincial regulations for disposal.

Hazardous waste number:Not a RCRA hazardous waste.

14. TRANSPORT INFORMATION

The transport information provided in this section only applies to the material/formulation itself, and is not specific to any package/configuration.

U.S. Department of Transportation Ground (49 CFR)

Proper shipping name: RQ, Environmentally hazardous substance, liquid, n.o.s.

Hazard class or division: 9
Identification number: UN 3082

Packing group: UN 30

DOT Hazardous Substance(s): alpha,alpha-Dimethylbenzylhydroperoxide

IDH number: 1330583 Product name: LOCTITE® 263™ THREADLOCKER

International Air Transportation (ICAO/IATA)

Proper shipping name: RQ, Environmentally hazardous substance, liquid, n.o.s.

Hazard class or division: 9

Identification number: UN 3082 Packing group: III

Water Transportation (IMO/IMDG)

Proper shipping name: RQ, ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.

Hazard class or division: 9
Identification number: UN 3082

Packing group:

15. REGULATORY INFORMATION

United States Regulatory Information

TSCA 8 (b) Inventory Status: All components are listed or are exempt from listing on the Toxic Substances Control Act

Inventory.

TSCA 12 (b) Export Notification: None above reporting de minimis

CERCLA/SARA Section 302 EHS: None above reporting de minimis. CERCLA/SARA Section 311/312: Immediate Health, Delayed Health

CERCLA/SARA Section 313: This product contains the following toxic chemicals subject to the reporting requirements of

section 313 of the Emergency Planning and Community Right-To-Know Act of 1986 (40

CFR 372). Cumene hydroperoxide (CAS# 80-15-9).

CERCLA Reportable quantity: Cumene hydroperoxide (CAS# 80-15-9) 10 lbs. (4.54 kg)

California Proposition 65: This product contains a chemical known in the State of California to cause cancer.

Canada Regulatory Information

IDH number: 1330583

CEPA DSL/NDSL Status: One or more components are not listed on, and are not exempt from listing on either the

Domestic Substances List or the Non-Domestic Substances List.

16. OTHER INFORMATION

This safety data sheet contains changes from the previous version in sections: 2

Prepared by: Product Safety and Regulatory Affairs

Issue date: 11/02/2017

DISCLAIMER: The data contained herein are furnished for information only and are believed to be reliable. However, Henkel Corporation and its affiliates ("Henkel") does not assume responsibility for any results obtained by persons over whose methods Henkel has no control. It is the user's responsibility to determine the suitability of Henkel's products or any production methods mentioned herein for a particular purpose, and to adopt such precautions as may be advisable for the protection of property and persons against any hazards that may be involved in the handling and use of any Henkel's products. In light of the foregoing, Henkel specifically disclaims all warranties, express or implied, including warranties of merchantability and fitness for a particular purpose, arising from sale or use of Henkel's products. Henkel further disclaims any liability for consequential or incidental damages of any kind, including lost profits.

Product name: LOCTITE® 263™ THREADLOCKER



Revision Number: 004.2 Issue date: 11/09/2016

1. PRODUCT AND COMPANY IDENTIFICATION

Product name: Retaining Compound 641 Medium IDH number:

Strength

Product type: Anaerobic Adhesive Restriction of Use: None identified

Company address: Henkel Corporation Henkel Way One

Rocky Hill, Connecticut 06067

Item number: 28802 Region: **United States Contact information:** Telephone: +1 (860) 571-5100

> MEDICAL EMERGENCY Phone: Poison Control Center 1-877-671-4608 (toll free) or 1-303-592-1711 TRANSPORT EMERGENCY Phone: CHEMTREC 1-800-424-9300 (toll free) or 1-703-527-3887

233546

Internet: www.henkelna.com

2. HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW

WARNING: CAUSES SKIN IRRITATION.

> MAY CAUSE AN ALLERGIC SKIN REACTION. CAUSES SERIOUS EYE IRRITATION.

HAZARD CLASS	HAZARD CATEGORY
SKIN IRRITATION	2
EYE IRRITATION	2A
SKIN SENSITIZATION	1

PICTOGRAM(S)



Precautionary Statements

Prevention: Avoid breathing vapors, mist, or spray. Wash affected area thoroughly after handling.

Contaminated work clothing should not be allowed out of the workplace. Wear protective

gloves, eye protection, and face protection.

IF ON SKIN: Wash with plenty of water. IF IN EYES: Rinse cautiously with water for several Response:

minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If skin irritation or rash occurs: Get medical attention. If eye irritation persists: Get medical attention. Take off

contaminated clothing.

Storage: Not prescribed

Disposal: Dispose of contents and/or container according to Federal, State/Provincial and local

governmental regulations.

Classification complies with OSHA Hazard Communication Standard (29 CFR 1910.1200) and is consistent with the provisions of the United Nations Globally Harmonized System of Classification and Labeling of Chemicals (GHS).

See Section 11 for additional toxicological information.

COMPOSITION / INFORMATION ON INGREDIENTS

Hazardous Component(s)	CAS Number	Percentage*
Polyglycol dimethacrylate	25852-47-5	60 - 70
Polyglycol dioctanoate	18268-70-7	10 - 20
Cumene hydroperoxide	80-15-9	1 - 5
Saccharin	81-07-2	1 - 5
Cumene	98-82-8	0.1 - 1

^{*} Exact percentages may vary or are trade secret. Concentration range is provided to assist users in providing appropriate protections.

4. FIRST AID MEASURES

Inhalation: Move to fresh air. If not breathing, give artificial respiration. If breathing is

difficult, give oxygen. Get medical attention.

Skin contact: Immediately flush skin with plenty of water (using soap, if available). Remove

contaminated clothing and footwear. Wash clothing before reuse. Get medical

attention.

Eye contact: Rinse immediately with plenty of water, also under the eyelids, for at least 15

minutes. Get medical attention.

Ingestion: DO NOT induce vomiting unless directed to do so by medical personnel.

Never give anything by mouth to an unconscious person. Get medical

attention.

Symptoms: See Section 11.

5. FIRE FIGHTING MEASURES

Extinguishing media: Water spray (fog), foam, dry chemical or carbon dioxide.

Special firefighting procedures: Wear self-contained breathing apparatus and full protective clothing, such as

turn-out gear. In case of fire, keep containers cool with water spray.

Unusual fire or explosion hazards: Uncontrolled polymerization may occur at high temperatures resulting in

explosions or rupture of storage containers.

Hazardous combustion products: Oxides of carbon. Irritating organic vapours.

6. ACCIDENTAL RELEASE MEASURES

Use personal protection recommended in Section 8, isolate the hazard area and deny entry to unnecessary and unprotected personnel.

Environmental precautions:Do not allow product to enter sewer or waterways.

Clean-up methods: Remove all sources of ignition. Evacuate and ventilate spill area; dike spill to

prevent entry into water system; wear full protective equipment during cleanup. Soak up with inert absorbent material (e.g. sand, silica gel, acid binder, universal binder, sawdust). Scrape up as much material as possible. Store in a partly filled, closed container until disposal. Refer to Section 8 "Exposure

Controls / Personal Protection" prior to clean up.

7. HANDLING AND STORAGE

Handling: Use only with adequate ventilation. Prevent contact with eyes, skin and

clothing. Do not breathe vapor and mist. Wash thoroughly after handling.

Keep container closed. Refer to Section 8.

Storage: For safe storage, store at or below 38 °C (100.4 °F)

Keep in a cool, well ventilated area away from heat, sparks and open flame.

Keep container tightly closed until ready for use.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Employers should complete an assessment of all workplaces to determine the need for, and selection of, proper exposure controls and protective equipment for each task performed.

Hazardous Component(s)	ACGIH TLV	OSHA PEL	AIHA WEEL	OTHER
Polyglycol dimethacrylate	None	None	None	None
Polyglycol dioctanoate	None	None	None	None
Cumene hydroperoxide	None	None	1 ppm (6 mg/m3) TWA (SKIN)	None
Saccharin	None	None	None	None
Cumene	50 ppm TWA	50 ppm (245 mg/m3) PEL (SKIN)	None	None

Engineering controls: Provide adequate local exhaust ventilation to maintain worker exposure below

exposure limits.

Respiratory protection: Use NIOSH approved respirator if there is potential to exceed exposure

limit(s).

Eye/face protection: Safety goggles or safety glasses with side shields. Full face protection should

be used if the potential for splashing or spraying of product exists. Safety

showers and eye wash stations should be available.

Skin protection: Use chemical resistant, impermeable clothing including gloves and either an

apron or body suit to prevent skin contact. Neoprene gloves.

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical state:LiquidColor:YellowOdor:CharacteristicOdor threshold:Not available.pH:Not available.

 $\begin{array}{lll} \textbf{Vapor pressure:} & < 5 \text{ mm hg } (27 \text{ °C } (80.6 \text{ °F})) \\ \textbf{Boiling point/range:} & > 149 \text{ °C } (> 300.2 \text{ °F}) \\ \textbf{Melting point/ range:} & \text{Not available.} \\ \textbf{Specific gravity:} & 1.08 \text{ at } 20 \text{ °C } (68 \text{ °F}) \\ \textbf{Vapor density:} & \text{Not available.} \\ \end{array}$

Flash point: > 93.3 °C (> 199.94 °F) Tagliabue closed cup

Flammable/Explosive limits - lower:
Flammable/Explosive limits - upper:
Autoignition temperature:
Flammability:
Flammability:
Evaporation rate:
Solubility in water:

Not available.
Not applicable
Not available.
Slight

Partition coefficient (n-octanol/water):

VOC content:

Viscosity:

Decomposition temperature:

Not available.

Not available.

Not available.

10. STABILITY AND REACTIVITY

Stability: Stable under normal conditions of storage and use.

Hazardous reactions: None under normal processing. Polymerization may occur at elevated temperature or in the

presence of incompatible materials.

Hazardous decomposition

products:

IDH number: 233546

Oxides of carbon. Irritating organic vapours.

Incompatible materials: Free radical initiators. Oxidizing agents. Reducing agents. Metal oxides. Acids. Alkalis.

Reactivity: Not available.

Conditions to avoid: Elevated temperatures. Heat, flames, sparks and other sources of ignition. Store away from

incompatible materials.

11. TOXICOLOGICAL INFORMATION

Relevant routes of exposure: Skin, Inhalation, Eyes, Ingestion

Potential Health Effects/Symptoms

Inhalation: Inhalation of vapors or mists of the product may be irritating to the respiratory system. May

cause irritation to nose and throat.

Skin contact: Causes skin irritation. May cause allergic skin reaction.

Eye contact: Causes serious eye irritation.

Ingestion: May cause irritation to the gastrointestinal tract, mouth and mucous membranes.

Hazardous Component(s)	LD50s and LC50s	Immediate and Delayed Health Effects
Polyglycol dimethacrylate	None	Allergen, Irritant
Polyglycol dioctanoate	None	Irritant
Cumene hydroperoxide	Inhalation LC50 (Mouse, 4 h) = 200 mg/l	Allergen, Central nervous system, Corrosive, Irritant, Mutagen
Saccharin	Oral LD50 (Mouse) = 17 g/kg	No Target Organs
Cumene	Oral LD50 (Rat) = 2.91 g/kg Oral LD50 (Rat) = 1,400 mg/kg Inhalation LC50 (Rat, 4 h) = 8000 ppm	Central nervous system, Irritant, Lung

Hazardous Component(s)	NTP Carcinogen	IARC Carcinogen	OSHA Carcinogen (Specifically Regulated)
Polyglycol dimethacrylate	No	No	No
Polyglycol dioctanoate	No	No	No
Cumene hydroperoxide	No	No	No
Saccharin	No	No	No
Cumene	Reasonably Anticipated to be a Human Carcinogen.	Group 2B	No

12. ECOLOGICAL INFORMATION

Ecological information: Not available.

13. DISPOSAL CONSIDERATIONS

Information provided is for unused product only.

Recommended method of disposal: Follow all local, state, federal and provincial regulations for disposal.

Hazardous waste number:Not a RCRA hazardous waste.

14. TRANSPORT INFORMATION

The transport information provided in this section only applies to the material/formulation itself, and is not specific to any package/configuration.

U.S. Department of Transportation Ground (49 CFR)

Proper shipping name: RQ, Environmentally hazardous substance, liquid, n.o.s.

Hazard class or division: 9
Identification number: UN 3082

Packing group:

DOT Hazardous Substance(s): alpha,alpha-Dimethylbenzylhydroperoxide

International Air Transportation (ICAO/IATA)

Proper shipping name: RQ, Environmentally hazardous substance, liquid, n.o.s.

Hazard class or division: 9
Identification number: UN 3082
Packing group: III

Water Transportation (IMO/IMDG)

Proper shipping name: RQ, ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.

Hazard class or division: 9
Identification number: UN 3082
Packing group: III

15. REGULATORY INFORMATION

United States Regulatory Information

TSCA 8 (b) Inventory Status: All components are listed or are exempt from listing on the Toxic Substances Control Act

Inventory.

TSCA 12 (b) Export Notification: None above reporting de minimis

CERCLA/SARA Section 302 EHS: None above reporting de minimis.

CERCLA/SARA Section 311/312: Immediate Health, Delayed Health

This resolute section to a full surface.

CERCLA/SARA Section 313: This product contains the following toxic chemicals subject to the reporting requirements of

section 313 of the Emergency Planning and Community Right-To-Know Act of 1986 (40

CFR 372). Cumene hydroperoxide (CAS# 80-15-9). Saccharin (CAS# 81-07-2).

CERCLA Reportable quantity: Cumene hydroperoxide (CAS# 80-15-9) 10 lbs. (4.54 kg)

California Proposition 65: This product contains a chemical known in the State of California to cause cancer.

Canada Regulatory Information

IDH number: 233546

CEPA DSL/NDSL Status: Contains one or more components listed on the Non-Domestic Substances List. All other

components are listed on or are exempt from listing on the Domestic Substances List. Components listed on the NDSL must be tracked by all Canadian Importers of Record as required by Environment Canada. They may be imported into Canada in limited quantities.

Please contact Regulatory Affairs for additional details.

16. OTHER INFORMATION

This safety data sheet contains changes from the previous version in sections: Reviewed SDS. Reissued with new date.

Prepared by: Sheila Gines, Regulatory Affairs Specialist

Issue date: 11/09/2016

DISCLAIMER: The data contained herein are furnished for information only and are believed to be reliable. However, Henkel Corporation and its affiliates ("Henkel") does not assume responsibility for any results obtained by persons over whose methods Henkel has no control. It is the user's responsibility to determine the suitability of Henkel's products or any production methods mentioned herein for a particular purpose, and to adopt such precautions as may be advisable for the protection of property and persons against any hazards that may be involved in the handling and use of any Henkel's products. In light of the foregoing, Henkel specifically disclaims all warranties, express or implied, including warranties of merchantability and fitness for a particular purpose, arising from sale or use of Henkel's products. Henkel further disclaims any liability for consequential or incidental damages of any kind, including lost profits.

IDH number: 233546 Product name: Retaining Compound 641 Medium Strength



Revision Number: 002.1 Issue date: 09/11/2017

1. PRODUCT AND COMPANY IDENTIFICATION

Product name: LOCTITE 454 INSTANT ADHESIVE

GEL known as LOCTITE® QUICKTITE® INSTANT AD

Product type: Cyanoacrylate Restriction of Use: None identified

Company address: Henkel Corporation

Henkel Way One Rocky Hill, Connecticut 06067 **IDH number:** 680522

Item number:39202Region:United States

Contact information:

Telephone: +1 (860) 571-5100

MEDICAL EMERGÉNCY Phone: Poison Control Center 1-877-671-4608 (toll free) or 1-303-592-1711 TRANSPORT EMERGENCY Phone: CHEMTREC 1-800-424-9300 (toll free) or 1-703-527-3887

Internet: www.henkelna.com

2. HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW

WARNING: BONDS SKIN IN SECONDS.

COMBUSTIBLE LIQUID. CAUSES EYE IRRITATION.

MAY CAUSE RESPIRATORY IRRITATION.

HAZARD CLASS	HAZARD CATEGORY
FLAMMABLE LIQUID	4
EYE IRRITATION	2B
SPECIFIC TARGET ORGAN TOXICITY - SINGLE EXPOSURE	3

PICTOGRAM(S)



Precautionary Statements

Prevention:

Keep away from heat, sparks, open flames, hot surfaces - no smoking. Avoid breathing vapors, mist, or spray. Wash affected area thoroughly after handling. Use only outdoors or in a well-

ventilated area. Wear protective gloves, eye protection, and face protection.

Response:

Storage:

IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. Call a POISON CENTER or physician if you feel unwell. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical attention. In case of fire: Use foam, dry

chemical or carbon dioxide to extinguish.

Store in a well-ventilated place. Keep container tightly closed. Store in a well-ventilated place.

Keep cool. Store locked up.

Disposal:

Dispose of contents and/or container according to Federal, State/Provincial and local

governmental regulations.

IDH number: 680522 Product name: LOCTITE 454 INSTANT ADHESIVE GEL known as LOCTITE® QUICKTITE® INSTANT AD

Classification complies with OSHA Hazard Communication Standard (29 CFR 1910.1200) and is consistent with the provisions of the United Nations Globally Harmonized System of Classification and Labeling of Chemicals (GHS).

See Section 11 for additional toxicological information.

3. COMPOSITION / INFORMATION ON INGREDIENTS

Hazardous Component(s)	CAS Number	Percentage*
Ethyl 2-cyanoacrylate	7085-85-0	80 - 90
Treated fumed silica	67762-90-7	5 - 10

^{*} Exact percentages may vary or are trade secret. Concentration range is provided to assist users in providing appropriate protections

4. FIRST AID MEASURES

Inhalation: Move to fresh air. If breathing is difficult, give oxygen. If not breathing, give

artificial respiration. If symptoms develop and persist, get medical attention.

Skin contact: Do not pull bonded skin apart. Soak in warm soapy water. Gently peel apart

using a blunt instrument. If skin is burned due to the rapid generation of heat by a large drop, seek medical attention. If lips are bonded, apply warm water to the lips and encourage wetting and pressure from saliva in mouth. Peel or

roll lips apart. Do not pull lips apart with direct opposing force.

Eye contact: Immediately flush with plenty of water for at least 15 minutes. Get medical

attention. If eyelids are bonded closed, release eyelashes with warm water by covering with a wet pad. Do not force eye open. Cyanoacrylate will bond to eye protein and will cause a lachrymatory effect which will help to debond the adhesive. Keep eye covered until debonding is complete, usually within 1-3 days. Medical attention should be sought in case solid particles of polymerized cyanoacrylate trapped behind the eyelid caused abrasive

damage.

Ingestion: Ensure breathing passages are not obstructed. The product will polymerize

rapidly and bond to the mouth making it almost impossible to swallow. Saliva will separate any solidified product in several hours. Prevent the patient from

swallowing any separated mass.

Symptoms: See Section 11.

Notes to physician: Surgery is not necessary to separate accidentally bonded tissues. Experience

has shown that bonded tissues are best treated by passive, non-surgical first aid. If rapid curing has caused thermal burns they should be treated

symptomatically after adhesive is removed.

5. FIRE FIGHTING MEASURES

Extinguishing media: Water spray (fog), foam, dry chemical or carbon dioxide.

Special firefighting procedures: Wear a self-contained breathing apparatus with a full face piece operated in

pressure-demand or other positive pressure mode.

Unusual fire or explosion hazards: Not available.

IDH number: 680522

Hazardous combustion products:

Trace amounts of toxic and/or irritating fumes may be released and the use of

breathing apparatus is recommended.

6. ACCIDENTAL RELEASE MEASURES

Use personal protection recommended in Section 8, isolate the hazard area and deny entry to unnecessary and unprotected personnel.

Environmental precautions:Do not allow product to enter sewer or waterways.

Clean-up methods: Do not use cloths for mopping up. Flood with water to complete

polymerization and scrape off the floor. Cured material can be disposed of as

non-hazardous waste.

7. HANDLING AND STORAGE

Handling: Avoid contact with eyes, skin and clothing. Avoid breathing vapors or mists of

this product. Wash thoroughly after handling. Avoid contact with fabric or paper goods. Contact with these materials may cause rapid polymerization which can generate smoke and strong irritating vapors, and cause thermal

burns

Storage: Keep in a cool, well ventilated area away from heat, sparks and open flame.

Keep container tightly closed until ready for use.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Employers should complete an assessment of all workplaces to determine the need for, and selection of, proper exposure controls and protective equipment for each task performed.

Hazardous Component(s)	ACGIH TLV	OSHA PEL	AIHA WEEL	OTHER
Ethyl 2-cyanoacrylate	0.2 ppm TWA	None	None	None
Treated fumed silica	10 mg/m3 TWA Inhalable dust. 3 mg/m3 TWA Respirable fraction	15 mg/m3 TWA Total dust. 5 mg/m3 TWA	None	None

Engineering controls:

Use positive down-draft exhaust ventilation if general ventilation is insufficient

to maintain vapor concentration below established exposure limits.

Respiratory protection: Use NIOSH approved respirator if there is potential to exceed exposure

limit(s).

Eye/face protection: Safety goggles or safety glasses with side shields. Full face protection should

be used if the potential for splashing or spraying of product exists.

Skin protection: Use nitrile gloves and aprons as necessary to prevent contact. Do not use

PVC, nylon or cotton.

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical state:

Color:
Clear
Odor:
Irritating
Odor threshold:
pH:
Not available.
Vapor pressure:

Clear
Irritating
1 - 2 ppm
Not available.
< 0.2 mm hg

Boiling point/range: > 149 °C (> 300.2 °F) **Melting point/ range:** Not available.

Specific gravity: 1.05 Vapor density: 3

Flash point: 80 - 93 °C (176°F - 199.4 °F) Tagliabue closed cup

Flammable/Explosive limits - lower: Not available.

IDH number: 680522 Product name: LOCTITE 454 INSTANT ADHESIVE GEL known as LOCTITE® QUICKTITE® INSTANT AD

Flammable/Explosive limits - upper:

Autoignition temperature:

Flammability:

Evaporation rate:

Not available.

Not applicable

Not available.

Solubility in water:Solubility in water:
Polymerises in presence of water.
Polymerizes on contact with water.

Partition coefficient (n-octanol/water): Not available.

VOC content: < 2 %; < 20 g/l (California SCAQMD Method 316B) (Estimated)

Viscosity:Not available.Decomposition temperature:Not available.

10. STABILITY AND REACTIVITY

Stability: Stable under recommended storage conditions.

Hazardous reactions: Rapid exothermic polymerization will occur in the presence of water, amines, alkalis and

alcohols.

Hazardous decomposition

products:

IDH number: 680522

None

Incompatible materials: Water, Amines, Alkalis, Alcohols.

Reactivity: Not available.

Conditions to avoid: Spontaneous polymerization.

11. TOXICOLOGICAL INFORMATION

Relevant routes of exposure: Skin, Inhalation, Eyes

Potential Health Effects/Symptoms

Inhalation: May cause respiratory tract irritation. Exposure to vapors above the established exposure limit

results in respiratory irritation, which may lead to difficulty in breathing and tightness in the

chest.

Skin contact: May cause skin irritation. May cause allergic skin reaction. Bonds skin in seconds.

Cyanoacrylates have been reported to cause allergic reaction but due to rapid polymerization at the skin surface, an allergic response is rare. Cyanoacrylates generate heat on solidification. In rare circumstances a large drop will burn the skin. Cured adhesive does not present a health

hazard even if bonded to the skin.

Eye contact: Irritating to eyes. Causes excessive tearing. Eyelids may bond.

Ingestion: Not expected to be harmful by ingestion. Rapidly polymerizes (solidifies) and bonds in mouth. It

is almost impossible to swallow.

Hazardous Component(s)	LD50s and LC50s	Immediate and Delayed Health Effects
Ethyl 2-cyanoacrylate	None	Irritant, Allergen, Respiratory
Treated fumed silica	None	Irritant

Hazardous Component(s)	NTP Carcinogen	IARC Carcinogen	OSHA Carcinogen (Specifically Regulated)
Ethyl 2-cyanoacrylate	No	No	No
Treated fumed silica	No	No	No

12. ECOLOGICAL INFORMATION

Ecological information: Not available.

13. DISPOSAL CONSIDERATIONS

Information provided is for unused product only.

Recommended method of disposal:Dispose of according to Federal, State and local governmental regulations.

Hazardous waste number:Not a RCRA hazardous waste.

14. TRANSPORT INFORMATION

The transport information provided in this section only applies to the material/formulation itself, and is not specific to any package/configuration.

U.S. Department of Transportation Ground (49 CFR)

Proper shipping name: Combustible liquid, n.o.s. (Cyanoacrylate ester)

Hazard class or division: Combustible Liquid

Identification number: NA 1993
Packing group: III

International Air Transportation (ICAO/IATA)

Proper shipping name: Aviation regulated liquid, n.o.s. (Cyanoacrylate ester)

Hazard class or division: 9
Identification number: UN 3334
Packing group: III

Exceptions: Primary packs containing less than 500ml are unregulated by this mode of

transport and may be shipped unrestricted.

Water Transportation (IMO/IMDG)

Proper shipping name: Not regulated Hazard class or division: None Identification number: None Packing group: None

15. REGULATORY INFORMATION

United States Regulatory Information

TSCA 8 (b) Inventory Status: All components are listed or are exempt from listing on the Toxic Substances Control Act

Inventory.

TSCA 12 (b) Export Notification: None above reporting de minimis

CERCLA/SARA Section 302 EHS: None above reporting de minimis.

CERCLA/SARA Section 311/312: Immediate Health, Delayed Health, Fire, Reactive

CERCLA/SARA Section 313: None above reporting de minimis.

California Proposition 65: This product contains a chemical known to the State of California to cause birth defects or

other reproductive harm.

Canada Regulatory Information

IDH number: 680522

CEPA DSL/NDSL Status: Contains one or more components listed on the Non-Domestic Substances List. All other

components are listed on or are exempt from listing on the Domestic Substances List. Components listed on the NDSL must be tracked by all Canadian Importers of Record as required by Environment Canada. They may be imported into Canada in limited quantities.

Please contact Regulatory Affairs for additional details.

16. OTHER INFORMATION

This safety data sheet contains changes from the previous version in sections: New Safety Data Sheet format.

Prepared by: Product Safety and Regulatory Affairs

Issue date: 09/11/2017

IDH number: 680522

DISCLAIMER: The data contained herein are furnished for information only and are believed to be reliable. However, Henkel Corporation and its affiliates ("Henkel") does not assume responsibility for any results obtained by persons over whose methods Henkel has no control. It is the user's responsibility to determine the suitability of Henkel's products or any production methods mentioned herein for a particular purpose, and to adopt such precautions as may be advisable for the protection of property and persons against any hazards that may be involved in the handling and use of any Henkel's products. In light of the foregoing, Henkel specifically disclaims all warranties, express or implied, including warranties of merchantability and fitness for a particular purpose, arising from sale or use of Henkel's products. Henkel further disclaims any liability for consequential or incidental damages of any kind, including lost profits.