



Kit Revision Date: 10/24/2025

832HT HIGH TEMPERATURE EPOXY KIT

MG Chemicals Multipart Product Kit

This product is a kit made up of multiple parts. Each part is an independently packaged chemical component and has independent hazard assessments.

Kit Content

<i>Part</i>	<i>Product Name</i>	<i>Product Use</i>
A	832HT-A	Epoxy Resin
B	8320-B	Epoxy hardener

Safety Data Sheets for each part listed above follow this cover sheet.

Transportation Instruction

Before offering this product kit for transport, read Section 14 for all parts listed above.



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1 Identification

Product identifier

Trade name: 832HT-A

Other Means of Identification: High Temperature Epoxy (Part A)

Related Part Number: 832HT-Part A, 832HT-375ML, 832HT-375MLCA, 832HT-3L, 832HT-60L

Application of the substance / the mixture Epoxy resin

Uses advised against Not for use as a spray coating

Details of the supplier of the safety data sheet

Manufacturer/Supplier:

MG Chemicals (Head Office)

1210 Corporate Drive

Burlington, Ontario L7L 5R6

CANADA

+(1) 800-340-0772

+(1) 905-331-1396

info@mgchemicals.com

Distributor:

Masline

511 Clinton Ave S

Rochester, New York 14620

United States

+(1) 586-546-5373

Information department: sds@mgchemicals.com

Emergency telephone number:

For hazardous material incidents ONLY (leaks, spills, fires, exposures or accidents)

USA or CANADA-Call Verisk 3E at +1-866-519-4752 or +1-760-476-3962 (Service access code: 335388)

For emergencies involving the transport of dangerous goods; 24/7 service

CANADA-Call CANUTEC collect at +1-613-996-6666 or *666 on cellular phones

2 Hazard identification

Classification of the substance or mixture

Skin Irritation - Category 2 H315 Causes skin irritation.

Eye damage/irritation – Category 2A H319 Causes serious eye irritation.

Sensitization - skin – Category 1 H317 May cause an allergic skin reaction.

Carcinogenicity – Category 2 H351 Suspected of causing cancer. Route of exposure: Inhalation.

Label elements

GHS label elements

The product is classified and labeled according to the Globally Harmonized System (GHS).

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Hazard pictograms



GHS07 GHS08

Signal word Warning

Hazard-determining components of labeling:

phenol, polymer with formaldehyde, glycidyl ether

reaction product: bisphenol-A-(epichlorhydrin) epoxy resin (number average molecular weight ≤ 700)

Hazard statements

H315 Causes skin irritation.

H319 Causes serious eye irritation.

H317 May cause an allergic skin reaction.

H351 Suspected of causing cancer. Route of exposure: Inhalation.

Precautionary statements

P102 Keep out of reach of children.

P273 Avoid release to the environment.

P280 Wear protective gloves / eye protection.

P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

P333+P313 If skin irritation or rash occurs: Get medical advice.

P391 Collect spillage.

P501 Dispose of contents and container in accordance with local, regional, and national regulations.

Other hazards Not available

3 Composition/Information on ingredients

Chemical characterization: Mixtures

Description: Mixture of the substances listed below with nonhazardous additions.

Dangerous components:

28064-14-4	phenol, polymer with formaldehyde, glycidyl ether Alternative CAS number: 9003-36-5	98–99% w/w *
25068-38-6	reaction product: bisphenol-A-(epichlorhydrin) epoxy resin (number average molecular weight ≤ 700) Alternative CAS number: 1675-54-3	1.0% w/w
1333-86-4	Carbon black	0.4% w/w

* Actual concentration ranges are withheld as a trade secret.

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4 First-aid measures

- **Description of first aid measures**

- **After inhalation:**

- Remove person to fresh air and keep comfortable for breathing.

- If feeling unwell: Call a POISON CENTRE or doctor.

- **After skin contact:**

- Wash with plenty water.

- If skin irritation or rash occurs: Get medical advice or attention.

- Take off contaminated clothing and wash it before reuse.

- **After eye contact:**

- Rinse cautiously with water for 20 minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

- If eye irritation persists: Get medical advice or attention.

- **After swallowing:**

- Rinse mouth.

- Do NOT induce vomiting.

- If symptoms persist consult doctor.

- **Most important symptoms and effects, both acute and delayed**

- No further relevant information available.

- **Indication of any immediate medical attention and special treatment needed**

- No further relevant information available.

5 Fire-fighting measures

- **Extinguishing media**

- **Suitable extinguishing agents:** Use fire fighting measures that suit the environment.

- **Special hazards arising from the substance or mixture**

- Not flammable or combustible, but burns if involved in a fire. Produces irritating smoke of unknown toxicity in fires.

- Prevent fire-fighting wash from entering waterway or sewer system.

- **Hazardous combustion products:**

- Carbon Oxides (COx)

- other toxic fumes

- **Advice for firefighters**

- **Protective equipment:** Wear self-contained breathing apparatus and full fire-fighting turn-out gear.

6 Accidental release measures

- **Personal precautions, protective equipment and emergency procedures**

- Avoid breathing mist, spray, or vapors.

- Remove or keep away all sources of extreme heat or open flames.

- **Environmental precautions:**

- Avoid release to the environment.

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Do not allow to enter sewers/ surface or ground water.

· **Methods and material for containment and cleaning up:**

Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).

Collect liquid in a sealable, chemical-resistant container.

Wash residue with a paper towel and place dirty towels in container.

Use soap and water to remove the last traces of residue.

· **Reference to other sections**

See Section 7 for information on safe handling.

See Section 8 for information on personal protection equipment.

See Section 13 for disposal information.

7 Handling and storage

· **Precautions for safe handling**

Keep out of reach of children.

Wear protective gloves and eye protection.

Wash hands and exposed skin thoroughly after handling.

Take off contaminated clothing and wash it before reuse.

Collect spillage.

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

· **Information about protection against explosions and fires:** No special measures required.

· **Conditions for safe storage, including any incompatibilities**

· **Storage:**

· **Requirements to be met by storerooms and receptacles:**

Keep in a dry and clean area, away from incompatible substances

DO NOT FREEZE. Store in a clean and dry area between 5 to 35 °C.

· **Information about storage in one common storage facility:** Not required.

· **Further information about storage conditions:** Keep receptacle tightly sealed.

· **Specific end use(s)** See section 1.2

8 Exposure controls/ Personal protection

· **Control parameters**

· **Components with limit values that require monitoring at the workplace:**

1333-86-4 Carbon black

EL (Canada) TWA: 3 mg/m³

IARC 2B

EV (Canada) TWA: 3.5 mg/m³

PEL (USA) TWA: 3.5 mg/m³

REL (USA) TWA: 3.5* mg/m³

*0.1 in presence of PAHs; See Pocket Guide Apps.A+C

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TLV (USA)	TWA: 3* mg/m ³ *inhalable fraction, A3
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· **Additional information:**

The lists that were valid during the creation were used as basis.
Refer to the national or regional occupational exposure limit regulation for abbreviations and acronyms.

· **Exposure controls**

· **Appropriate engineering controls** No further data; see section 7.

· **Personal protective equipment:**

· **General protective and hygienic measures:**

Keep away from foodstuffs, beverages and feed.
Immediately remove all soiled and contaminated clothing.
Wash hands before breaks and at the end of work.
Avoid contact with the eyes and skin.

· **Breathing equipment:**

If the product is heated or worker has a known allergic reaction, consider using a full mask with organic vapor cartridge or with an independent air supply.

· **Protection of hands:**

Due to missing tests no recommendation to the glove material can be given for the product/ the preparation/ the chemical mixture.



Protective gloves: EN374

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.
Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation

· **Material of gloves**

The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer. As the product is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application.

· **Penetration time of glove material**

The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.

· **Eye protection:**



Safety glasses or tightly sealed goggles: EN 166

* 9 Physical and chemical properties

· **Information on basic physical and chemical properties**

· **Physical state**

Liquid

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· Form: · Color: · Odor: · Odor threshold: · Melting point/Melting range: · Boiling point/Boiling range: · Flammability: · Explosion limits: · Lower: · Upper: · Flash point: · Auto igniting: · Decomposition temperature: · pH-value: · Viscosity: · Kinematic at 20 °C (68 °F): · Dynamic: · Solubility in / Miscibility with · Water: · Partition coefficient (n-octanol/water): · Vapor pressure: · Density at 20 °C (68 °F): · Relative density at 25 °C (77 °F): · Vapor density (air=1): · Particle characteristics	Highly viscous Black Mild Not determined. Undetermined. ≥150 °C (≥302 °F) Non flammable Not applicable Not applicable 150 °C (302 °F) Not determined Not determined. Not determined. 44,000 mm²/s Not determined. Insoluble. Not miscible or difficult to mix. Not determined. Not determined. 1.1 g/cm³ (9.1795 lbs/gal) 1.17 Not determined. Not applicable.
· Other information · Important information on protection of health and environment, and on safety. · Ignition temperature: · Danger of explosion: · Evaporation rate	Product is not selfigniting. Product does not present an explosion hazard. Not determined.

10 Stability and reactivity

- **Reactivity** Reacts exothermically with amines.
- **Chemical stability** Chemically stable at normal temperatures and pressures.
 - **Thermal decomposition / conditions to be avoided:**

No decomposition if used according to specifications.
- **Possibility of hazardous reactions** No dangerous reactions known.
- **Conditions to avoid** Avoid open flames, excessive heat, sparks, ignition sources, and incompatible substances.
- **Incompatible materials:**

Strong oxidizing agents

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Strong acids
alkali

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- **Hazardous decomposition products:**
No dangerous decomposition products known.
Hazardous combustion products: see section 5.

11 Toxicological information

- **Information on toxicological effects**

- **Acute toxicity:**

· LD/LC50 values that are relevant for classification:		
28064-14-4 phenol, polymer with formaldehyde, glycidyl ether		
Oral	LD50	>2,000 mg/kg (rat)
Dermal	LD50	>2,000 mg/kg (rabbit)
25068-38-6 reaction product: bisphenol-A-(epichlorhydrin) epoxy resin (number average molecular weight ≤ 700)		
Oral	LD50	11,400 mg/kg (rat)
1333-86-4 Carbon black		
Oral	LD50	>15,400 mg/kg (rat)
Dermal	LD50	>3,000 mg/kg (rabbit)

- **Primary irritant effect:**
 - **on the skin:** Irritant to skin and mucous membranes.
 - **on the eye:** Irritating effect.
- **Sensitization:** Sensitization possible through skin contact.
- **Carcinogenicity**
Contains: Carbon black (CAS 1333-86-4)
Because the carbon black is bound in the epoxy liquid mixture, it is not available as an airborne hazard (dust, mist, or spray) under normal use and emergency conditions.
- **Summary of effects and symptoms by route of exposure**
 - **Eyes:**
redness, serious irritation
pain
 - **Skin:**
rash, allergic contact dermatitis
redness, irritation
 - **Inhalation:**
cough
irritation of the respiratory tract
 - **Swallowed:**
Low toxicity:
irritation
- **Delayed and immediate effects as well as chronic effects from short and long-term exposure**
Prolonged and repeated exposure to uncured epoxy hardener may lead to skin sensitization.

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· Additional toxicological information:

The product shows the following dangers according to internally approved calculation methods for preparations:
Irritant

· Carcinogenic categories

· IARC (International Agency for Research on Cancer)		
1333-86-4	Carbon black	2B
· NTP (National Toxicology Program)		
None of the ingredients is listed.		

12 Ecological information

· Toxicity

· Aquatic toxicity:

Toxic to aquatic life with long lasting effects.
Avoid release to the environment.
Collect spillage.

28064-14-4 phenol, polymer with formaldehyde, glycidyl ether	
LC50 96h	>1–≤10 mg/L (not defined) In Europe, similar epoxy resin mixtures with CAS 28064-14-4 are generally classified as chronic category 2 marine pollutant due to LC50 96 h of >1 mg/L but ≤10 mg/L.
1333-86-4 Carbon black	
EC50/ 24 h	>5,600 mg/L (aquatic invertebrates)
EC50/ 72 h	>10,000 mg/L (aquatic algae and cyanobacteria)
EC0/ 3 h	>800 mg/L (microorganisms)
LC50	>1,000 mg/L (fish)

· **Persistence and degradability** No further relevant information available.

· **Bioaccumulative potential** No further relevant information available.

· **Mobility in soil** No further relevant information available.

· Results of PBT and vPvB assessment

- **PBT:** Not applicable.
- **vPvB:** Not applicable.

· Other adverse effects

· **Remark:** Toxic for fish

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13 Disposal considerations

- **Waste treatment methods**
 - **Recommendation:** This material and its container must be disposed of as hazardous waste.
- **Uncleaned packagings:**
 - **Recommendation:**

Containers may still present a chemical hazard/ danger when empty.

Dispose of contents in accordance with all local, regional, national, and international regulations.

Where possible retain label warnings and SDS and observe all notices pertaining to the product.

14 Transport information

· UN-Number · DOT/TDG, IMDG, IATA	UN3082
· UN proper shipping name · DOT/TDG · IMDG · IATA	Environmentally hazardous substance, liquid, n.o.s. (phenol, polymer with formaldehyde, glycidyl ether) NOT REGULATED by Sea IMDG per 2.10.2.7 for sizes 5L or less. ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (phenol, polymer with formaldehyde, glycidyl ether) NOT REGULATED by Air IATA Special Provision A197 for sizes 5L or less. Environmentally hazardous substance, liquid, n.o.s. (phenol, polymer with formaldehyde, glycidyl ether)
· Transport hazard class(es) · DOT/TDG, IMDG	 · Class · Label 9 Miscellaneous dangerous substances and articles 9
· IATA	 · Class · Label 9 Miscellaneous dangerous substances and articles 9

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· Packing group · DOT/TDG, IMDG, IATA	III
· Environmental hazards: · Marine pollutant: · Special marking (IATA):	MARINE POLLUTANT ENVIRONMENTALLY HAZARDOUS Symbol (fish and tree)
· Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code	Not applicable.
· Transport/Additional information: · DOT/TDG · Quantity limitations	On passenger aircraft/rail: 450 L On cargo aircraft only: 450 L
· IMDG · Limited quantities (LQ) · Excepted quantities (EQ)	5L Code: E1 Maximum net quantity per inner packaging: 30 ml Maximum net quantity per outer packaging: 1000 ml
· Special precautions for user · Hazard identification number (Kemler code): · EMS Number: · Stowage Category	Not applicable. 90 F-A,S-F A
· UN "Model Regulation":	UN 3082 ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (PHENOL, POLYMER WITH FORMALDEHYDE, GLYCIDYL ETHER), 9, III

* 15 Regulatory information

- **Safety, health and environmental regulations/legislation specific for the substance or mixture**
 - **OSHA Hazard Communication Standard (29 CFR Part 1900)**
The safety data sheet and label comply with HCS 2024.
 - **Hazardous Products Act (R.S.C., 1985, c. H-3)**
The safety data sheet and label comply with the Hazardous Product Act and WHMIS 2023.
 - **Sara**

· Section 355 (extremely hazardous substances):
None of the ingredients is listed.
· Section 313 (Specific toxic chemical listings):
None of the ingredients is listed.

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· TSCA (Toxic Substances Control Act):
All components have the value ACTIVE.
· Hazardous Air Pollutants
None of the ingredients is listed.

· Proposition 65
· Chemicals known to cause cancer:
1333-86-4 Carbon black
· Chemicals known to cause reproductive toxicity for females:
None of the ingredients is listed.
· Chemicals known to cause reproductive toxicity for males:
None of the ingredients is listed.
· Chemicals known to cause developmental toxicity:
None of the ingredients is listed.

· **Note:**

This product contains carbon black, but it is bound and exposures during normal conditions of uses are below the Safe Harbor Threshold.

· **Carcinogenic categories**

· TLV (Threshold Limit Value)
1333-86-4 Carbon black
A4
· NIOSH-Ca (National Institute for Occupational Safety and Health)
1333-86-4 Carbon black

· **Canadian substance listings:**

· Canadian Domestic Substances List (DSL)
All ingredients are listed.
· Canadian Non-Domestic Substances List (NDSL)
None of the ingredients is listed.
· Canadian Ingredient Disclosure list (limit 0.1%)
None of the ingredients is listed.
· Canadian Ingredient Disclosure list (limit 1%)
None of the ingredients is listed.

· **HMIS-ratings (scale 0 - 4)**

Health = * 2

Fire = 1

Reactivity = 0

· **Europe**

· **RoHS (Restriction of Hazardous Substances Directive)**

This product does not contain any lead, cadmium, mercury, hexavalent chromium, PBB's, PBDE's, DEHP, BBP, DBP, or DIBP and complies with European RoHS regulations.

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· **WEEE (Waste Electrical and Electronic Equipment Directive)**

This product is not a piece of electrical or electronics equipment, and is therefore not governed by this regulation.

· **Per- and polyfluoroalkyl substances (PFAS)**

None of the ingredients is listed.

16 Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

· **Department issuing SDS:** Regulatory department

· **Contact:** sds@mgchemicals.com

· **Version number of previous version:** 6.10

· **Date of preparation** 06/18/2025

· **Abbreviations and acronyms:**

IMDG: International Maritime Code for Dangerous Goods

DOT: US Department of Transportation

IATA: International Air Transport Association

EINECS: European Inventory of Existing Commercial Chemical Substances

ELINCS: European List of Notified Chemical Substances

CAS: Chemical Abstracts Service (division of the American Chemical Society)

LC50: Lethal concentration, 50 percent

LD50: Lethal dose, 50 percent

PBT: Persistent, Bioaccumulative and Toxic

vPvB: very Persistent and very Bioaccumulative

NIOSH: National Institute for Occupational Safety

· *** Data compared to the previous version altered.**

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1 Identification

· Product identifier

· Trade name: 8320

· Other Means of Identification: Epoxy hardener (Part B)

· Related Part Number:

8320-Part B, 832HT-B, 832B-B, 832C-B, 8320-125ML, 8320-150ML, 8320-1L, 8320-12L, 8320-20L, 832B-375ML (B), 832B-450ML (B), 832B-3L (B), 832B-12L (B), 832B-60L (B), 832C-375ML (B), 832C-450ML (B), 832C-3L (B), 832C-60L (B), 832HT-375ML (B), 832HT-3L (Kit)

· Application of the substance / the mixture Epoxy Hardener

· Uses advised against Not for use as a spray coating

· Details of the supplier of the safety data sheet

Manufacturer/Supplier:

MG Chemicals (Head Office)
1210 Corporate Drive
Burlington, Ontario L7L 5R6
CANADA

+(1) 800-340-0772

+(1) 905-331-1396

info@mgchemicals.com

Distributor:

Masline
511 Clinton Ave S
Rochester, New York 14620
United States
+(1) 586-546-5373

· Information department: sds@mgchemicals.com

· Emergency telephone number:

For hazardous material incidents ONLY (leaks, spills, fires, exposures or accidents)
USA or CANADA-Call 3E at +1-866-519-4752 or +1-760-476-3962 (Service access code: 335388)

For emergencies involving the transport of dangerous goods; 24/7 service
CANADA-Call CANUTEC collect at +1-613-996-6666 or *666 on cellular phones

* 2 Hazard identification

· Classification of the substance or mixture

Skin Corrosion - Category 1B	H314 Causes severe skin burns and eye damage.
Eye damage/irritation – Category 1	H318 Causes serious eye damage.
Sensitization - skin – Category 1	H317 May cause an allergic skin reaction.
Aquatic Chronic 2	H411 Toxic to aquatic life with long lasting effects.

· Label elements

· GHS label elements

The product is classified and labeled according to the Globally Harmonized System (GHS).

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Hazard pictograms



GHS05 GHS07 GHS09

Signal word Danger

Hazard-determining components of labeling:

fatty acids, C18-unsatd., dimers, reactionproducts with polyethylenepolyamines
triethylenetetramine

Hazard statements

H314 Causes severe skin burns and eye damage.
H317 May cause an allergic skin reaction.
H411 Toxic to aquatic life with long lasting effects.

Precautionary statements

P102 Keep out of reach of children.
P261 Avoid breathing fumes and vapors.
P280 Wear protective gloves / eye protection.
P303+P361+P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water.
P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P310 Immediately call a POISON CENTER/doctor.
P501 Dispose of contents and container in accordance with local, regional, and national regulations.

Other hazards Not available

3 Composition/Information on ingredients

Chemical characterization: Mixtures

Description: Mixture of the substances listed below with nonhazardous additions.

Dangerous components:

68410-23-1	fatty acids, C18-unsatd., dimers, reactionproducts with polyethylenepolyamines	92.0% w/w
112-24-3	triethylenetetramine	8.0% w/w

4 First-aid measures

Description of first aid measures

General information: Immediately remove any clothing soiled by the product.

After inhalation:

Remove person to fresh air and keep comfortable for breathing.
Immediately call a POISON CENTER or doctor.

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- **After skin contact:**
Take off immediately all contaminated clothing. Wash with plenty of water or shower.
Immediately call a POISON CENTRE or doctor.
Wash contaminated clothing before reuse.
If skin irritation or rash occurs: Get medical advice or attention.
- **After eye contact:**
Rinse cautiously with water for at least 30 minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
Immediately call a POISON CENTER or doctor.
- **After swallowing:**
Rinse mouth. Do not induce vomiting.
Immediately call a POISON CENTER or doctor.
- **Most important symptoms and effects, both acute and delayed**
In case of exposure to nitrogen oxides (NO_x) combustion products or triethylenetetramine vapors during a fire, the symptoms may be delayed.
For significant exposures, the exposed person should be kept under medical surveillance for 48 hours.
- **Indication of any immediate medical attention and special treatment needed**
No further relevant information available.

5 Fire-fighting measures

- **Extinguishing media**
 - **Suitable extinguishing agents:** Use fire fighting measures that suit the environment.
- **Special hazards arising from the substance or mixture**
Not flammable or combustible, but burns if involved in a fire. Produces irritating smoke of unknown toxicity in fires.
Prevent fire-fighting wash from entering waterway or sewer system.
Inhalation of toxic smoke during fire may have delayed effects. Exposed person may need to be put under surveillance for 48 h.
- **Hazardous combustion products:**
Carbon Oxides (CO_x)
Nitrogen Oxides (NO_x)
- **Advice for firefighters**
 - **Protective equipment:** Wear self-contained breathing apparatus and full fire-fighting turn-out gear.

6 Accidental release measures

- **Personal precautions, protective equipment and emergency procedures**
Wear protective equipment. Keep unprotected persons away.
Ensure adequate ventilation
Do not breathe fumes, mist or vapors.
Remove or keep away all sources of extreme heat or open flames.
- **Environmental precautions:**
Avoid release to the environment.

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Do not allow to enter sewers/ surface or ground water.

· **Methods and material for containment and cleaning up:**

Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).

Collect liquid in a sealable, chemical-resistant container.

Wash residue with a paper towel and place dirty towels in container.

Use soap and water to remove the last traces of residue.

· **Reference to other sections**

See Section 7 for information on safe handling.

See Section 8 for information on personal protection equipment.

See Section 13 for disposal information.

7 Handling and storage

· **Precautions for safe handling**

Prevent formation of aerosols.

Wear protective gloves and eye protection.

Wash hands and exposed skin thoroughly after handling.

Take off contaminated clothing and wash it before reuse.

Collect spillage.

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

Do not eat, drink, or smoke when using this product.

Avoid contact with skin and eyes.

· **Information about protection against explosions and fires:** No special measures required.

· **Conditions for safe storage, including any incompatibilities**

· **Storage:**

· **Requirements to be met by storerooms and receptacles:**

Keep in a dry and clean area, away from incompatible substances

· **Information about storage in one common storage facility:** Not required.

· **Further information about storage conditions:**

Keep receptacle tightly sealed.

Store locked up.

· **Specific end use(s)** See section 1.2

8 Exposure controls/ Personal protection

· **Control parameters**

· **Components with limit values that require monitoring at the workplace:**

112-24-3 triethylenetetramine

EV (Canada) TWA: 3 mg/m³, 0.5 ppm

Skin

WEEL (USA) TWA: 6 mg/m³, 1 ppm

Skin

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· **Additional information:**

The lists that were valid during the creation were used as basis.
Refer to the national or regional occupational exposure limit regulation for abbreviations and acronyms.

· **Exposure controls**

· **Appropriate engineering controls** No further data; see section 7.

· **Personal protective equipment:**

· **General protective and hygienic measures:**

Keep away from foodstuffs, beverages and feed.
Immediately remove all soiled and contaminated clothing.
Wash hands before breaks and at the end of work.
Avoid contact with the eyes and skin.

· **Breathing equipment:**

Advice should be sought from respiratory protection specialists.
In case of brief exposure or low pollution use respiratory filter device. In case of intensive or longer exposure use respiratory protective device that is independent of circulating air.
If the product is heated or worker has a known allergic reaction, consider using a full mask with organic vapor cartridge or with an independent air supply.

· **Protection of hands:**

Due to missing tests no recommendation to the glove material can be given for the product/ the preparation/ the chemical mixture.



Protective gloves: EN374

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.
Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation

· **Material of gloves**

The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer. As the product is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application.

· **Penetration time of glove material**

The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.

· **Eye protection:**



Safety glasses or tightly sealed goggles: EN 166

9 Physical and chemical properties

· **Information on basic physical and chemical properties**

· **Physical state**

Liquid

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· Form: · Color: · Odor: · Odor threshold: · Melting point/Melting range: · Boiling point/Boiling range: · Flammability: · Explosion limits: · Lower: · Upper: · Flash point: · Auto igniting: · Decomposition temperature: · pH-value: · Viscosity: · Kinematic at 20 °C (68 °F): · Dynamic: · Solubility in / Miscibility with · Water: · Partition coefficient (n-octanol/water): · Vapor pressure at 20 °C (68 °F): · Relative density at 25 °C (77 °F): · Vapor density (air=1): · Particle characteristics	Highly viscous Amber colored musty & ammonia-like Not determined. Undetermined. Undetermined. Non flammable Not applicable Not applicable 122 °C (251.6 °F) Not determined Not determined. Not determined. 6,000 mm²/s Not determined. Not miscible or difficult to mix. Not determined. >0 hPa 0.96 >5 Not applicable
· Other information · Important information on protection of health and environment, and on safety. · Ignition temperature: · Danger of explosion: · Organic solvents: · Evaporation rate	Product is not selfigniting. Product does not present an explosion hazard. Not available Not determined.

10 Stability and reactivity

· **Reactivity**

Reacts exothermically with ketones, halogenated hydrocarbons, cyanides, nitriles, and epoxides.
May attack metals such as aluminum, zinc, copper, and their alloys.

· **Chemical stability** Chemically stable at normal temperatures and pressures.

· **Thermal decomposition / conditions to be avoided:**

No decomposition if used according to specifications.

· **Possibility of hazardous reactions** No dangerous reactions known.

· **Conditions to avoid** Avoid open flames, excessive heat, sparks, ignition sources, and incompatible substances.

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- **Incompatible materials:**
Strong oxidizing agents
Strong acids
- **Hazardous decomposition products:**
No dangerous decomposition products known.
Hazardous combustion products: see section 5.

11 Toxicological information

- **Information on toxicological effects**

- **Acute toxicity:**

· LD/LC50 values that are relevant for classification:		
ATE (Acute Toxicity Estimate)		
Dermal	LD50	10,063 mg/kg (rabbit)
112-24-3 triethylenetetramine		
Oral	LD50	2,500 mg/kg (rat)
Dermal	LD50	805 mg/kg (rabbit)

- **Primary irritant effect:**

- **on the skin:** Caustic effect on skin and mucous membranes.

- **on the eye:**

Strong caustic effect.

Strong irritant with the danger of severe eye injury.

- **Sensitization:** Sensitization possible through skin contact.

- **Summary of effects and symptoms by route of exposure**

- **Eyes:**

eye damage, pain
redness, serious irritation

- **Skin:**

rash, allergic contact dermatitis
redness, irritation
chemical burns

Triethylenetetramine can be absorbed through skin leading to toxic effects.

When heated, hot triethylenetetramine vapors may also result in itching of the face with skin redness (erythema) and swelling (edema).

- **Inhalation:** irritation of the respiratory tract

- **Swallowed:**

May cause pain and corrosive burns to the mouth, throat, esophagus, and stomach.

irritation to the mouth, throat, esophagus, and stomach

allergic reactions

see inhalation symptoms

- **Delayed and immediate effects as well as chronic effects from short and long-term exposure**

Prolonged or repeated exposure may cause skin allergies.

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· **Additional toxicological information:**

The product shows the following dangers according to internally approved calculation methods for preparations:

Corrosive

Irritant

Swallowing will lead to a strong caustic effect on mouth and throat and to the danger of perforation of esophagus and stomach.

· **Carcinogenic categories**

· **IARC (International Agency for Research on Cancer)**

None of the ingredients is listed.

· **NTP (National Toxicology Program)**

None of the ingredients is listed.

12 Ecological information

· **Toxicity**

· **Aquatic toxicity:**

Toxic to aquatic life with long lasting effects.

Avoid release to the environment.

Collect spillage.

112-24-3 triethylenetetramine

EC50/ 48 h 24 mg/L (daphnia)

LC50 96h 420 mg/L (guppy)

IC50 72h 2 mg/L (algae)

· **Persistence and degradability** No further relevant information available.

· **Bioaccumulative potential** No further relevant information available.

· **Mobility in soil** No further relevant information available.

· **Results of PBT and vPvB assessment**

· **PBT:** Not applicable.

· **vPvB:** Not applicable.

· **Other adverse effects**

· **Remark:** Toxic for fish

13 Disposal considerations

· **Waste treatment methods**

· **Recommendation:** This material and its container must be disposed of as hazardous waste.

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· **Uncleaned packagings:**

· **Recommendation:**

Containers may still present a chemical hazard/ danger when empty.
Dispose of contents in accordance with all local, regional, national, and international regulations.
Where possible retain label warnings and SDS and observe all notices pertaining to the product.

* 14 Transport information

· UN-Number · DOT/TDG, IMDG, IATA	UN2735
· UN proper shipping name · DOT/TDG, IATA · IMDG	Amines, liquid, corrosive, n.o.s. (triethylenetetramine) AMINES, LIQUID, CORROSIVE, N.O.S. (triethylenetetramine)
· Transport hazard class(es) · DOT/TDG (Transport dangerous goods):	
  · Class · Label	8 Corrosive substances 8
· IMDG, IATA	
 · Class · Label	8 Corrosive substances 8
· Packing group · DOT/TDG, IMDG, IATA	II
· Environmental hazards: · Marine pollutant: · Special marking (IATA):	Product contains environmentally hazardous substances: fatty acids, C18-unsatd., dimers, reactionproducts with polyethylenepolyamines MARINE POLLUTANT ENVIRONMENTALLY HAZARDOUS
· Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code	Not applicable.

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· Transport/Additional information:	
	Limited Quantity
832B-375ML, 832B-450ML, 832B-3L, 832C-375ML, 832C-450ML, 832C-3L, 832HT-375ML, 832HT-3L	
· DOT/TDG	
· Quantity limitations	On passenger aircraft/rail: 1 L On cargo aircraft only: 30 L
· Remarks:	Special marking with the symbol (fish and tree).
· IMDG	
· Limited quantities (LQ)	1L
· Excepted quantities (EQ)	Code: E2 Maximum net quantity per inner packaging: 30 ml Maximum net quantity per outer packaging: 500 ml
· Special precautions for user	
· Hazard identification number (Kemler code):	Not applicable.
· EMS Number:	F-A,S-B
· Segregation groups	(SGG18) Alkalis
· Stowage Category	A
· Segregation Code	SG35 Stow "separated from" SGG1-acids
· UN "Model Regulation":	
UN 2735 AMINES, LIQUID, CORROSIVE, N.O.S. (TRIETHYLENETETRAMINE), 8, II	

15 Regulatory information

· Safety, health and environmental regulations/legislation specific for the substance or mixture

· OSHA Hazard Communication Standard (29 CFR Part 1900)

The safety data sheet and label comply with HCS 2024.

· Hazardous Products Act (R.S.C., 1985, c. H-3)

The safety data sheet and label comply with the Hazardous Product Act and WHMIS 2023.

· Sara

· Section 355 (extremely hazardous substances):
None of the ingredients is listed.
· Section 313 (Specific toxic chemical listings):
None of the ingredients is listed.
· TSCA (Toxic Substances Control Act):
All components have the value ACTIVE.

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· Hazardous Air Pollutants
None of the ingredients is listed.

· **Proposition 65**

· Chemicals known to cause cancer:
None of the ingredients is listed.

· Chemicals known to cause reproductive toxicity for females:
None of the ingredients is listed.

· Chemicals known to cause reproductive toxicity for males:
None of the ingredients is listed.

· Chemicals known to cause developmental toxicity:
None of the ingredients is listed.

· **Carcinogenic categories**

· TLV (Threshold Limit Value)
None of the ingredients is listed.

· NIOSH-Ca (National Institute for Occupational Safety and Health)
None of the ingredients is listed.

· **Canadian substance listings:**

· Canadian Domestic Substances List (DSL)
All ingredients are listed.

· Canadian Non-Domestic Substances List (NDSL)
None of the ingredients is listed.

· Canadian Ingredient Disclosure list (limit 0.1%)
112-24-3 triethylenetetramine

· Canadian Ingredient Disclosure list (limit 1%)
None of the ingredients is listed.

· **HMIS-ratings (scale 0 - 4)**

Health = * 3

Fire = 1

Reactivity = 0

· **Europe**

· **RoHS (Restriction of Hazardous Substances Directive)**

This product does not contain any lead, cadmium, mercury, hexavalent chromium, PBB's, PBDE's, DEHP, BBP, DBP, or DIBP and complies with European RoHS regulations.

· **WEEE (Waste Electrical and Electronic Equipment Directive)**

This product is not a piece of electrical or electronics equipment, and is therefore not governed by this regulation.

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· **Per- and polyfluoroalkyl substances (PFAS)**

None of the ingredients is listed.

16 Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

- **Department issuing SDS:** Regulatory department
- **Contact:** sds@mgchemicals.com
- **Version number of previous version:** 4.01
- **Date of preparation** 10/24/2025
- **Abbreviations and acronyms:**
 - IMDG: International Maritime Code for Dangerous Goods
 - DOT: US Department of Transportation
 - IATA: International Air Transport Association
 - EINECS: European Inventory of Existing Commercial Chemical Substances
 - ELINCS: European List of Notified Chemical Substances
 - CAS: Chemical Abstracts Service (division of the American Chemical Society)
 - LC50: Lethal concentration, 50 percent
 - LD50: Lethal dose, 50 percent
 - PBT: Persistent, Bioaccumulative and Toxic
 - vPvB: very Persistent and very Bioaccumulative
 - NIOSH: National Institute for Occupational Safety
- *** Data compared to the previous version altered.**

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