

Safety Data Sheet

According to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830
Revision date: 15/01/2020 Date of issue: 19/08/2013

Version: 4.0

SECTION 1: Identification of the Substance/mixture and of the Company/Undertaking

1.1. Product Identifier

Product form Mixture
Product Name MED-4162
Synonyms Silicone Dispersion

1.2. Relevant Identified Uses of the Substance or Mixture and Uses Advised Against

1.2.1. Relevant Identified Uses

Use of the Substance/Mixture For professional use only.

1.2.2. Uses Advised Against

No additional information available

1.3. Details of the Supplier of the Safety Data Sheet

NuSil Technology Europe
1198 Avenue Maurice Donat
Le Natura Bt. 2
06250 Mougins
France
+33 4 92 96 93 31

ehs@nusil.com

www.nusil.com

1.4. Emergency Telephone Number

Emergency Number : 800-424-9300 CHEMTREC (in US); +1 703-527-3887 CHEMTREC
(International and Maritime)
+(44)-870-8200418
+(353)-19014670

SECTION 2: Hazards Identification

2.1. Classification of the Substance or Mixture

Classification According to Regulation (EC) No. 1272/2008 [CLP]

Flam. Liq. 3	H226
Acute Tox. 4 (Dermal)	H312
Acute Tox. 4 (Inhalation:vapour)	H332
Skin Irrit. 2	H315
Eye Irrit. 2	H319
STOT SE 3	H335
STOT RE 2	H373
Asp. Tox. 1	H304

Full text of hazard classes and H-statements : see section 16

2.2. Label Elements

Labelling According to Regulation (EC) No. 1272/2008 [CLP]

Hazard Pictograms (CLP)



GHS02



GHS07



GHS08

Signal Word (CLP)

Danger

MED-4162

Safety Data Sheet

According to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830

Hazardous Ingredients

Hazard Statements (CLP)

Reaction mass of ethylbenzene and xylene

H226 - Flammable liquid and vapour.

H304 - May be fatal if swallowed and enters airways.

H312+H332 - Harmful in contact with skin or if inhaled

H315 - Causes skin irritation.

H319 - Causes serious eye irritation.

H335 - May cause respiratory irritation.

H373 - May cause damage to organs (hearing organs) through prolonged or repeated exposure.

Precautionary Statements (CLP)

P210 - Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.

P233 - Keep container tightly closed.

P240 - Ground and bond container and receiving equipment.

P241 - Use explosion-proof electrical, ventilating, and lighting equipment.

P242 - Use non-sparking tools.

P243 - Take action to prevent static discharges.

P260 - Do not breathe vapors, mist, or spray

P264 - Wash hands, forearms, and exposed areas thoroughly after handling

P271 - Use only outdoors or in a well-ventilated area.

P280 - Wear eye protection, protective clothing, protective gloves

P301+P310 - IF SWALLOWED: Immediately call a POISON CENTER or doctor

P302+P352 - IF ON SKIN: Wash with plenty of water

P303+P361+P353 - IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water .

P304+P340 - IF INHALED: Remove person to fresh air and keep comfortable for breathing.

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

P312 - Call a POISON CENTRE or doctor if you feel unwell.

P321 - Specific treatment (see Section 4 on this SDS)

P331 - Do NOT induce vomiting.

P332+P313 - If skin irritation occurs: Get medical advice/attention.

P337+P313 - If eye irritation persists: Get medical advice/attention.

P362+P364 - Take off contaminated clothing and wash it before reuse.

P370+P378 - In case of fire: Use water spray, fog, carbon dioxide, alcohol-resistant foam, or dry chemical to extinguish

P403+P235 - Store in a well-ventilated place. Keep cool.

P405 - Store locked up.

P501 - Dispose of contents/container to hazardous or special waste collection point, in accordance with local, regional, national and/or international regulation.

2.3. Other Hazards

Contains PBT/vPvB substances $\geq 0.1\%$ assessed in accordance with REACH Annex XIII

Other Hazards Not Contributing Exposure may aggravate pre-existing eye, skin, or respiratory

MED-4162

Safety Data Sheet

According to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830

to the Classification conditions.

SECTION 3: Composition/Information on Ingredients

3.1. Substances

Not applicable

3.2. Mixtures

Name	Product Identifier	%	Classification According to Regulation (EC) No. 1272/2008 [CLP]
Reaction mass of ethylbenzene and xylene	(CAS-No.) Not Applicable (REACH Registration No.) 01-2119539452-40-0053 (EC-No.) 905-588-0	60 - 80	Flam. Liq. 3, H226 Acute Tox. 4 (Dermal), H312 Acute Tox. 4 (Inhalation:vapour), H332 Skin Irrit. 2, H315 Eye Irrit. 2, H319 STOT SE 3, H335 STOT RE 2, H373 Asp. Tox. 1, H304
Octamethylcyclotetrasiloxane substance listed as REACH Candidate (Octamethylcyclotetrasiloxane (D4))	(CAS-No.) 556-67-2 (EC-No.) 209-136-7 (EC Index-No.) 014-018-00-1	< 3	Repr. 2, H361f Aquatic Chronic 4, H413
Decamethylcyclopentasiloxane substance listed as REACH Candidate (Decamethylcyclopentasiloxane (D5))	(CAS-No.) 541-02-6 (EC-No.) 208-764-9	< 3	Not classified
Dodecamethylcyclohexasiloxane substance listed as REACH Candidate (Dodecamethylcyclohexasiloxane (D6))	(CAS-No.) 540-97-6 (EC-No.) 208-762-8	< 1	Not classified

Full text of H-statements: see section 16

SECTION 4: First Aid Measures

4.1. Description of First-aid Measures

First-Aid Measures General

Never give anything by mouth to an unconscious person. If you feel unwell, seek medical advice (show the label where possible).

First-Aid Measures After Inhalation

When symptoms occur: go into open air and ventilate suspected area. Remove to fresh air and keep at rest in a position comfortable for breathing. Get medical advice/attention.

First-Aid Measures After Skin Contact

Immediately remove contaminated clothing. Immediately drench affected area with water for at least 15 minutes. Immediately call a poison center or doctor/physician.

MED-4162

Safety Data Sheet

According to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830

First-Aid Measures After Eye Contact

Immediately rinse with water for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a poison center or doctor/physician.

First-Aid Measures After Ingestion

Do NOT induce vomiting. Rinse mouth. Immediately call a POISON CENTER or doctor/physician.

4.2. Most Important Symptoms and Effects Both Acute and Delayed

Symptoms/Effects

Harmful in contact with skin or if inhaled. May be fatal if swallowed and enters airways. Causes skin irritation. Causes serious eye irritation. May cause respiratory irritation. May cause damage to organs through prolonged or repeated exposure.

Symptoms/Effects After Inhalation

Inhalation is likely to cause adverse health effects including but not limited to: irritation, difficulty breathing, and unconsciousness. High concentrations may cause central nervous system depression such as dizziness, vomiting, numbness, drowsiness, headache, and similar narcotic symptoms.

Symptoms/Effects After Skin Contact

Redness, pain, swelling, itching, burning, dryness, and dermatitis. This material is harmful through skin contact, and can cause adverse health effects or death in significant amounts. This material may be absorbed through the skin and eyes.

Symptoms/Effects After Eye Contact

Contact causes severe irritation with redness and swelling of the conjunctiva.

Symptoms/Effects After Ingestion

Aspiration into the lungs can occur during ingestion or vomiting and may cause lung injury.

Chronic Symptoms

May cause damage to organs (hearing organs) through prolonged or repeated exposure.

4.3. Indication of Any Immediate Medical Attention and Special Treatment Needed

If exposed or concerned, get medical advice and attention. If medical advice is needed, have product container or label at hand.

SECTION 5: Firefighting Measures

5.1. Extinguishing Media

Suitable Extinguishing Media

Water spray, fog, carbon dioxide (CO₂), alcohol-resistant foam, or dry chemical.

Unsuitable Extinguishing Media

Application of water stream to hot product may cause frothing and increase fire intensity. Do not use a heavy water stream. A heavy water stream may spread burning liquid.

5.2. Special Hazards Arising From the Substance or Mixture

Fire Hazard

Flammable liquid and vapour. Vapours are heavier than air and may travel considerable distance to an ignition source and flash back to source of vapours.

Explosion Hazard

May form flammable or explosive vapour-air mixture.

Reactivity

Reacts violently with strong oxidisers. Increased risk of fire or explosion.

Hazardous Decomposition Products in Case of Fire

Carbon oxides (CO, CO₂). Silicon oxides. Formaldehyde.

5.3. Advice for Firefighters

Precautionary Measures Fire

Under fire conditions, hazardous fumes will be present. Exercise caution when fighting any chemical fire.

MED-4162

Safety Data Sheet

According to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830

Firefighting Instructions	Use water spray or fog for cooling exposed containers. In case of major fire and large quantities: Evacuate area. Fight fire remotely due to the risk of explosion.
Protection During Firefighting	Do not enter fire area without proper protective equipment, including respiratory protection.

SECTION 6: Accidental Release Measures

6.1. Personal Precautions, Protective Equipment and Emergency Procedures

General Measures	Do not get in eyes, on skin, or on clothing. Do not breathe vapor, mist or spray. Keep away from heat, hot surfaces, sparks, open flames, and other ignition sources. No smoking. Use special care to avoid static electric charges.
------------------	--

6.1.1. For Non-Emergency Personnel

Protective Equipment	Use appropriate personal protective equipment (PPE).
Emergency Procedures	Evacuate unnecessary personnel. Stop leak if safe to do so.

6.1.2. For Emergency Responders

Protective Equipment	Equip cleanup crew with proper protection.
Emergency Procedures	Upon arrival at the scene, a first responder is expected to recognize the presence of dangerous goods, protect oneself and the public, secure the area, and call for the assistance of trained personnel as soon as conditions permit. Ventilate area. Eliminate ignition sources.

6.2. Environmental Precautions

Notify authorities if liquid enters sewers or public waters. Prevent entry to sewers and public waters.

6.3. Methods and Materials for Containment and Cleaning Up

For Containment	Contain any spills with dikes or absorbents to prevent migration and entry into sewers or streams. As an immediate precautionary measure, isolate spill or leak area in all directions. Ventilate area.
Methods For Cleaning Up	Clean up spills immediately and dispose of waste safely. Absorb and/or contain spill with inert material. Do not take up in combustible material such as: saw dust or cellulosic material. Transfer spilled material to a suitable container for disposal. Use only non-sparking tools. Contact competent authorities after a spill.

6.4. Reference to Other Sections

See Section 8 for exposure controls and personal protection and Section 13 for disposal considerations.

SECTION 7: Handling And Storage

7.1. Precautions for Safe Handling

Additional Hazards When Processed	Flammable vapors may accumulate in the head space of closed systems. Container may remain hazardous when empty. Handle empty containers with care because residual vapours are flammable.
-----------------------------------	---

MED-4162

Safety Data Sheet

According to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830

Precautions for Safe Handling

Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Do not get in eyes, on skin, or on clothing. Do not breathe vapours, mist, spray. Take precautionary measures against static discharge. Use only non-sparking tools. Use only outdoors or in a well-ventilated area. Handle empty containers with care because they may still present a hazard. Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work.

Hygiene Measures

Handle in accordance with good industrial hygiene and safety procedures.

7.2. Conditions for Safe Storage, Including Any Incompatibilities

Technical Measures

Comply with applicable regulations. Take action to prevent static discharges. Ground and bond container and receiving equipment. Use explosion-proof electrical, ventilating, and lighting equipment.

Storage Conditions

Store in a dry, cool place. Keep/Store away from direct sunlight, extremely high or low temperatures and incompatible materials. Store locked up/in a secure area. Store in a well-ventilated place. Keep container tightly closed. Keep in fireproof place.

Incompatible Materials

Strong acids, strong bases, strong oxidizers.

7.3. Specific End Use(S)

For professional use only.

SECTION 8: Exposure Controls/Personal Protection

8.1. Control Parameters

Xylenes (o-, m-, p- isomers)		
EU	IOELV TWA (mg/m³)	221 mg/m³ (pure)
EU	IOELV TWA (ppm)	50 ppm (pure)
EU	IOELV STEL (mg/m³)	442 mg/m³ (pure)
EU	IOELV STEL (ppm)	100 ppm (pure)
EU	Notes	Possibility of significant uptake through the skin (pure)
Austria	MAK (mg/m³)	221 mg/m³ (all isomers)
Austria	MAK (ppm)	50 ppm (all isomers)
Austria	MAK Short time value (mg/m³)	442 mg/m³
Austria	MAK Short time value (ppm)	100 ppm
Belgium	Limit value (mg/m³)	221 mg/m³
Belgium	Limit value (ppm)	50 ppm
Belgium	Short time value (mg/m³)	442 mg/m³
Belgium	Short time value (ppm)	100 ppm
Belgium	OEL chemical category (BE)	Skin, Skin notation pure
Bulgaria	OEL TWA (mg/m³)	221 mg/m³ (pure)
Bulgaria	OEL TWA (ppm)	50 ppm (pure)
Bulgaria	OEL STEL (mg/m³)	442 mg/m³ (pure)
Bulgaria	OEL STEL (ppm)	100 ppm (pure)

MED-4162

Safety Data Sheet

According to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830

Croatia	GVI (granična vrijednost izloženosti) (mg/m³)	221 mg/m³
Croatia	GVI (granična vrijednost izloženosti) (ppm)	50 ppm
Croatia	KGVI (kratkotrajna granična vrijednost izloženosti) (mg/m³)	442 mg/m³
Croatia	KGVI (kratkotrajna granična vrijednost izloženosti) (ppm)	100 ppm
Croatia	OEL chemical category (HR)	Skin notation
Croatia	Croatia - BLV	1,5 mg/l Parameter: Xylene - Medium: blood - Sampling time: at the end of the work shift (alcohol before exposure to Xylene raises occurrence) 1,5 g/g creatinine Parameter: Methylhippuric acid - Medium: urine - Sampling time: at the end of the work shift (calculated on the average Creatinine value of 1.2 g/L urine)
Cyprus	OEL TWA (mg/m³)	221 mg/m³
Cyprus	OEL TWA (ppm)	50 ppm
Cyprus	OEL STEL (mg/m³)	442 mg/m³
Cyprus	OEL STEL (ppm)	100 ppm
Cyprus	OEL chemical category (CY)	Skin-potential for cutaneous absorption
Czech Republic	Expoziční limity (PEL) (mg/m³)	200 mg/m³
Czech Republic	OEL chemical category (CZ)	Potential for cutaneous absorption
Czech Republic	Czech Republic - BLV	820 µmol/mmol Creatinine Parameter: Methylhippuric acid - Medium: urine - Sampling time: end of shift 1400 mg/g creatinine Parameter: Methylhippuric acid - Medium: urine - Sampling time: end of shift
Denmark	Grænseværdie (langvarig) (mg/m³)	109 mg/m³ (Xylene, all isomers)
Denmark	Grænseværdie (langvarig) (ppm)	25 ppm (Xylene, all isomers)
Estonia	OEL TWA (mg/m³)	200 mg/m³
Estonia	OEL TWA (ppm)	50 ppm
Estonia	OEL STEL (mg/m³)	450 mg/m³
Estonia	OEL STEL (ppm)	100 ppm
Estonia	OEL chemical category (ET)	Skin notation
Finland	HTP-arvo (8h) (mg/m³)	220 mg/m³
Finland	HTP-arvo (8h) (ppm)	50 ppm
Finland	HTP-arvo (15 min)	440 mg/m³
Finland	HTP-arvo (15 min) (ppm)	100 ppm
Finland	OEL chemical category (FI)	Potential for cutaneous absorption
Finland	Finland - BLV	Parameter: Methylhippuric acid -

MED-4162

Safety Data Sheet

According to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830

		Medium: urine - Sampling time: after the shift
France	VLE (mg/m ³)	442 mg/m ³ (restrictive limit)
France	VLE (ppm)	100 ppm (restrictive limit)
France	VME (mg/m ³)	221 mg/m ³ (restrictive limit)
France	VME (ppm)	50 ppm (restrictive limit)
France	OEL chemical category (FR)	Risk of cutaneous absorption
France	France - BLV	1500 mg/g creatinine Parameter: Methylhippuric acid - Medium: urine - Sampling time: end of shift
Germany	Occupational exposure limit value (mg/m ³)	440 mg/m ³ (all isomers)
Germany	Occupational exposure limit value (ppm)	100 ppm (all isomers)
Germany	TRGS 903 Biological limit value	2000 mg/l Parameter: Methylhippuric(tolur-)acid (all isomers) - Medium: urine - Sampling time: end of shift (all isomers)
Germany	Chemical category	Skin notation all isomers
Gibraltar	Eight hours mg/m ³	221 mg/m ³ (pure)
Gibraltar	Eight hours ppm	50 ppm (pure)
Gibraltar	Short-term mg/m ³	442 mg/m ³ (pure)
Gibraltar	Short-term ppm	100 ppm (pure)
Gibraltar	OEL chemical category (GI)	Skin notation pure
Greece	OEL TWA (mg/m ³)	435 mg/m ³
Greece	OEL TWA (ppm)	100 ppm
Greece	OEL STEL (mg/m ³)	650 mg/m ³
Greece	OEL STEL (ppm)	150 ppm
Greece	OEL chemical category (GR)	skin - potential for cutaneous absorption
Hungary	AK-érték	221 mg/m ³
Hungary	CK-érték	442 mg/m ³
Hungary	OEL chemical category (HU)	Potential for cutaneous absorption
Ireland	OEL (8 hours ref) (mg/m ³)	221 mg/m ³
Ireland	OEL (8 hours ref) (ppm)	50 ppm
Ireland	OEL (15 min ref) (mg/m ³)	442 mg/m ³
Ireland	OEL (15 min ref) (ppm)	100 ppm
Ireland	OEL chemical category (IE)	Potential for cutaneous absorption
Italy	OEL TWA (mg/m ³)	221 mg/m ³ (pure)
Italy	OEL TWA (ppm)	50 ppm (pure)
Italy	OEL STEL (mg/m ³)	442 mg/m ³ (pure)
Italy	OEL STEL (ppm)	100 ppm (pure)
Italy	OEL chemical category (IT)	skin - potential for cutaneous absorption pure
Latvia	OEL TWA (mg/m ³)	221 mg/m ³
Latvia	OEL TWA (ppm)	50 ppm

MED-4162

Safety Data Sheet

According to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830

Latvia	OEL chemical category (LV)	skin - potential for cutaneous exposure
Lithuania	IPRV (mg/m³)	221 mg/m³ (mixed isomers, pure)
Lithuania	IPRV (ppm)	50 ppm (mixed isomers, pure)
Lithuania	TPRV (mg/m³)	442 mg/m³ (mixed isomers, pure)
Lithuania	TPRV (ppm)	100 ppm (mixed isomers, pure)
Lithuania	OEL chemical category (LT)	Skin notation
Luxembourg	OEL TWA (mg/m³)	221 mg/m³
Luxembourg	OEL TWA (ppm)	50 ppm
Luxembourg	OEL STEL (mg/m³)	442 mg/m³
Luxembourg	OEL STEL (ppm)	100 ppm
Luxembourg	OEL chemical category (LU)	Possibility of significant uptake through the skin
Malta	OEL TWA (mg/m³)	221 mg/m³ (pure)
Malta	OEL TWA (ppm)	50 ppm (pure)
Malta	OEL STEL (mg/m³)	442 mg/m³ (pure)
Malta	OEL STEL (ppm)	100 ppm (pure)
Malta	OEL chemical category (MT)	Possibility of significant uptake through the skin pure
Netherlands	Grenswaarde TGG 8H (mg/m³)	210 mg/m³
Netherlands	Grenswaarde TGG 15MIN (mg/m³)	442 mg/m³
Norway	Grenseverdier (AN) (mg/m³)	108 mg/m³
Norway	Grenseverdier (AN) (ppm)	25 ppm
Norway	Grenseverdier (Korttidsverdi) (mg/m³)	135 mg/m³ (value calculated)
Norway	Grenseverdier (Korttidsverdi) (ppm)	37,5 ppm (value calculated)
Norway	OEL chemical category (NO)	Skin notation
Poland	NDS (mg/m³)	100 mg/m³ (mixture of isomers)
Poland	NDSch (mg/m³)	200 mg/m³ (mixture of isomers)
Portugal	OEL TWA (mg/m³)	221 mg/m³ (indicative limit value)
Portugal	OEL TWA (ppm)	50 ppm (indicative limit value)
Portugal	OEL STEL (mg/m³)	442 mg/m³ (indicative limit value)
Portugal	OEL STEL (ppm)	100 ppm (indicative limit value)
Portugal	OEL chemical category (PT)	A4 - Not Classifiable as a Human Carcinogen, skin - potential for cutaneous exposure indicative limit value
Romania	OEL TWA (mg/m³)	221 mg/m³ (pure)
Romania	OEL TWA (ppm)	50 ppm (pure)
Romania	OEL STEL (mg/m³)	442 mg/m³ (pure)
Romania	OEL STEL (ppm)	100 ppm (pure)
Romania	OEL chemical category (RO)	Skin notation pure
Romania	Romania - BLV	3 g/l Parameter: Methylhippuric acid - Medium: urine - Sampling time: end of shift
Slovakia	NPHV (priemerná) (mg/m³)	221 mg/m³

MED-4162

Safety Data Sheet

According to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830

Slovakia	NPHV (priemerná) (ppm)	50 ppm
Slovakia	NPHV (Hraničná) (mg/m³)	442 mg/m³
Slovakia	OEL chemical category (SK)	Potential for cutaneous absorption
Slovakia	Slovakia - BLV	1,5 mg/l Parameter: Xylene - Medium: blood - Sampling time: end of exposure or work shift (all isomers) 2000 mg/l Parameter: Methylhippuric acid - Medium: urine - Sampling time: end of exposure or work shift
Slovenia	OEL TWA (mg/m³)	221 mg/m³
Slovenia	OEL TWA (ppm)	50 ppm
Slovenia	OEL STEL (mg/m³)	442 mg/m³
Slovenia	OEL STEL (ppm)	100 ppm
Slovenia	OEL chemical category (SI)	Potential for cutaneous absorption
Spain	VLA-ED (mg/m³)	221 mg/m³ (indicative limit value)
Spain	VLA-ED (ppm)	50 ppm (indicative limit value)
Spain	VLA-EC (mg/m³)	442 mg/m³
Spain	VLA-EC (ppm)	100 ppm
Spain	OEL chemical category (ES)	skin - potential for cutaneous absorption
Spain	Spain - BLV	1 g/g creatinine Parameter: Methylhippuric acids - Medium: urine - Sampling time: end of shift
Sweden	nivågränsvärde (NVG) (mg/m³)	221 mg/m³ (Xylene)
Sweden	nivågränsvärde (NVG) (ppm)	50 ppm (Xylene)
Sweden	kortidsvärde (KTV) (mg/m³)	442 mg/m³ (Xylene)
Sweden	kortidsvärde (KTV) (ppm)	100 ppm (Xylene)
Sweden	OEL chemical category (SE)	Skin notation
Switzerland	KZGW (mg/m³)	870 mg/m³
Switzerland	KZGW (ppm)	200 ppm
Switzerland	MAK (mg/m³)	435 mg/m³
Switzerland	MAK (ppm)	100 ppm
Switzerland	OEL chemical category (CH)	Skin notation
Switzerland	Switzerland - BLV	2 g/l Parameter: Methylhippuric acid - Medium: urine - Sampling time: end of shift
United Kingdom	WEL TWA (mg/m³)	220 mg/m³
United Kingdom	WEL TWA (ppm)	50 ppm
United Kingdom	WEL STEL (mg/m³)	441 mg/m³
United Kingdom	WEL STEL (ppm)	100 ppm
United Kingdom	WEL chemical category	Potential for cutaneous absorption

MED-4162

Safety Data Sheet

According to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830

8.2. Exposure Controls

Appropriate Engineering Controls

Emergency eye wash fountains and safety showers should be available in the immediate vicinity of any potential exposure. Emergency eye wash fountains and safety showers should be available in the immediate vicinity of any potential exposure. Ensure adequate ventilation, especially in confined areas. Ensure all national/local regulations are observed. Gas detectors should be used when flammable gases or vapors may be released. Proper grounding procedures to avoid static electricity should be followed. Use explosion-proof equipment. Gas detectors should be used when toxic gases may be released. Gas detectors should be used when toxic gases may be released.

Personal Protective Equipment

Gloves. Protective clothing. Protective goggles. Insufficient ventilation: wear respiratory protection.



Materials for Protective Clothing

Chemically resistant materials and fabrics. Wear fire/flame resistant/retardant clothing.

Hand Protection

Wear chemically resistant protective gloves. Wear protective gloves.

Eye Protection

Chemical safety goggles.

Skin and Body Protection

Wear suitable protective clothing.

Respiratory Protection

If exposure limits are exceeded or irritation is experienced, approved respiratory protection should be worn. In case of inadequate ventilation, oxygen deficient atmosphere, or where exposure levels are not known wear approved respiratory protection.

Other Information

When using, do not eat, drink or smoke.

SECTION 9: Physical and Chemical Hazards

9.1. Information on Basic Physical and Chemical Properties

Physical State	Liquid
Colour	Colourless
Odour	Solvent
Odour Threshold	No data available
pH	No data available
Evaporation Rate	No data available
Melting Point	No data available
Freezing Point	No data available
Boiling Point	140 °C (284 °F)
Flash Point	27 °C (80 °F)
Auto-Ignition Temperature	No data available
Decomposition Temperature	No data available
Flammability (Solid, Gas)	Not applicable
Vapour Pressure	No data available
Relative Vapour Density At 20 °C	No data available
Relative Density	< 1 (water = 1)
Solubility	No data available

MED-4162

Safety Data Sheet

According to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830

Partition Coefficient n-Octanol/Water	No data available
Viscosity, Kinematic	No data available
Viscosity, Dynamic	No data available
Explosive Properties	No data available
Oxidising Properties	No data available
Explosive Limits	No data available

9.2. Other Information

VOC content	60 - 80 %
-------------	-----------

SECTION 10: Stability and Reactivity

10.1. Reactivity

Reacts violently with strong oxidisers. Increased risk of fire or explosion.

10.2. Chemical Stability

Flammable liquid and vapour. May form flammable or explosive vapour-air mixture.

10.3. Possibility Of Hazardous Reactions

Hazardous polymerization will not occur.

10.4. Conditions To Avoid

Direct sunlight, extremely high or low temperatures, heat, hot surfaces, sparks, open flames, incompatible materials, and other ignition sources.

10.5. Incompatible Materials

Strong acids, strong bases, strong oxidizers.

10.6. Hazardous Decomposition Products

Thermal decomposition may produce: Explosive hydrogen gas. Silicon oxides. Carbon oxides (CO, CO₂). Will decompose above 150 °C (>300° F) releasing formaldehyde vapors. Formaldehyde is a potential carcinogen and can act as a potential skin and respiratory sensitizer. Formaldehyde can also cause respiratory and eye irritation.

SECTION 11: Toxicological Information

11.1. Information On Toxicological Effects

Acute Toxicity Harmful in contact with skin. Harmful if inhaled.

MED-4162	
ATE CLP (dermal)	1617,647 mg/kg bodyweight
ATE CLP (vapours)	16,176 mg/l/4h
Octamethylcyclotetrasiloxane (556-67-2)	
LD50 Oral Rat	> 4800 mg/kg
LD50 Dermal Rabbit	> 2,5 ml/kg
LC50 Inhalation Rat	36 g/m ³ (Exposure time: 4 h)
ATE CLP (oral)	1540 mg/kg bodyweight
Decamethylcyclopentasiloxane (541-02-6)	
LD50 Oral Rat	> 5000 mg/kg (Species: Sprague-Dawley)
LD50 Dermal Rabbit	> 2000 mg/kg (Species: New Zealand White) No deaths reported
LC50 Inhalation Rat	8,67 mg/l/4h (Species: Fischer)
Dodecamethylcyclohexasiloxane (540-97-6)	
LD50 Oral Rat	> 50 g/kg
Reaction mass of ethylbenzene and xylene	

MED-4162

Safety Data Sheet

According to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830

Reaction mass of ethylbenzene and xylene	
LD50 Oral Rat	3523 mg/kg
LC50 Inhalation Rat	6700 ppm/4h
ATE CLP (dermal)	1100 mg/kg bodyweight
ATE CLP (vapours)	11 mg/l/4h
Skin Corrosion/Irritation	Causes skin irritation.
Eye Damage/Irritation	Causes serious eye irritation.
Respiratory or Skin Sensitization	Not classified (Based on available data, the classification criteria are not met)
Germ Cell Mutagenicity	Not classified (Based on available data, the classification criteria are not met)
Carcinogenicity	Not classified (Based on available data, the classification criteria are not met)
Reproductive Toxicity	Not classified (Based on available data, the classification criteria are not met)
Specific Target Organ Toxicity (Single Exposure)	May cause respiratory irritation.
Specific Target Organ Toxicity (Repeated Exposure)	May cause damage to organs (hearing organs) through prolonged or repeated exposure.
Aspiration Hazard	May be fatal if swallowed and enters airways.

SECTION 12: Ecological Information

12.1. Toxicity

Ecology - General Not classified.

Octamethylcyclotetrasiloxane (556-67-2)	
LC50 Fish 1	> 500 mg/l (Exposure time: 96 h - Species: Brachydanio rerio)
LC50 Fish 2	> 1000 mg/l (Exposure time: 96 h - Species: Lepomis macrochirus)

12.2. Persistence and Degradability

MED-4162	
Persistence and Degradability	Not established.

12.3. Bioaccumulative Potential

MED-4162	
Bioaccumulative potential	Not established.
Octamethylcyclotetrasiloxane (556-67-2)	
BCF Fish 1	12400
Log Pow	5,1

12.4. Mobility in Soil

No additional information available

12.5. Results of PBT and vPvB assessment

Octamethylcyclotetrasiloxane (556-67-2)	
This substance/mixture meets the PBT criteria of REACH regulation, annex XIII	
This substance/mixture meets the vPvB criteria of REACH regulation, annex XIII	
Decamethylcyclopentasiloxane (541-02-6)	
This substance/mixture meets the vPvB criteria of REACH regulation, annex XIII	
Dodecamethylcyclohexasiloxane (540-97-6)	
This substance/mixture meets the vPvB criteria of REACH regulation, annex XIII	

MED-4162

Safety Data Sheet

According to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830

12.6. Other Adverse Effects

Other Information

Avoid release to the environment.

SECTION 13: Disposal Considerations

13.1. Waste Treatment Methods

Product/Packaging Disposal

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

Recommendations

Additional Information

Handle empty containers with care because residual vapours are flammable.

Ecology - Waste Materials

Avoid release to the environment.

SECTION 14: Transport Information

The shipping description(s) stated herein were prepared in accordance with certain assumptions at the time the SDS was authored, and can vary based on a number of variables that may or may not have been known at the time the SDS was issued.

In accordance with ADR / RID / IMDG / IATA / ADN

ADR	IMDG	IATA	ADN	RID
14.1. UN Number				
1307	1307	1307	1307	1307
14.2. UN Proper Shipping Name				
XYLENES (Solution)	XYLENES (Solution)	XYLENES (Solution)	XYLENES (Solution)	XYLENES (Solution)
14.3. Transport Hazard Class(Es)				
3	3	3	3	3
				
14.4. Packing Group				
III	III	III	III	III
14.5. Environmental Hazards				
Dangerous for the environment : No	Dangerous for the environment : No Marine pollutant : No	Dangerous for the environment : No	Dangerous for the environment : No	Dangerous for the environment : No

14.6. Special Precautions For User

No additional information available

14.7. Transport in Bulk According to Annex II of MARPOL and The IBC Code

Not applicable

SECTION 15: Regulatory Information

15.1. Safety, Health and Environmental Regulations/Legislation Specific for the Substance or Mixture

15.1.1. EU-Regulations

Contains a substance on the REACH candidate list in concentration $\geq 0.1\%$ or with a lower specific limit:

Octamethylcyclotetrasiloxane (D4) (EC 209-136-7, CAS 556-67-2)

MED-4162

Safety Data Sheet

According to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830

Decamethylcyclopentasiloxane (D5) (EC 208-764-9, CAS 541-02-6),
Dodecamethylcyclohexasiloxane (D6) (EC 208-762-8, CAS 540-97-6)
Contains no REACH Annex XIV substances

15.1.2. National Regulations

No additional information available

15.2. Chemical Safety Assessment

No chemical safety assessment has been carried out

SECTION 16: Other Information

Indication of Changes

Section	Section Header	Change	Date Changed
1, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16	Minor changes to whole sections	Modified	15/01/2020
2	Classification According to Regulation (EC) No. 1272/2008 [CLP]	Modified	15/01/2020
3	Composition/information on ingredients	Modified	15/01/2020

Date of Preparation or Latest Revision 15/01/2020

Data Sources Information and data obtained and used in the authoring of this safety data sheet could come from database subscriptions, official government regulatory body websites, product/ingredient manufacturer or supplier specific information, and/or resources that include substance specific data and classifications according to GHS or their subsequent adoption of GHS.

Other Information According to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830

Full Text of H- and EUH-statements:

Acute Tox. 4 (Dermal)	Acute toxicity (dermal), Category 4
Acute Tox. 4 (Inhalation:vapour)	Acute toxicity (inhalation:vapour) Category 4
Aquatic Chronic 4	Hazardous to the aquatic environment — Chronic Hazard, Category 4
Asp. Tox. 1	Aspiration hazard, Category 1
Eye Irrit. 2	Serious eye damage/eye irritation, Category 2
Flam. Liq. 3	Flammable liquids, Category 3
Repr. 2	Reproductive toxicity, Category 2
Skin Irrit. 2	Skin corrosion/irritation, Category 2
STOT RE 2	Specific target organ toxicity — Repeated exposure, Category 2
STOT SE 3	Specific target organ toxicity — Single exposure, Category 3, Respiratory tract irritation
H226	Flammable liquid and vapour.
H304	May be fatal if swallowed and enters airways.
H312	Harmful in contact with skin.
H315	Causes skin irritation.
H319	Causes serious eye irritation.
H332	Harmful if inhaled.
H335	May cause respiratory irritation.
H361f	Suspected of damaging fertility.

MED-4162

Safety Data Sheet

According to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830

H373	May cause damage to organs through prolonged or repeated exposure.
H413	May cause long lasting harmful effects to aquatic life.

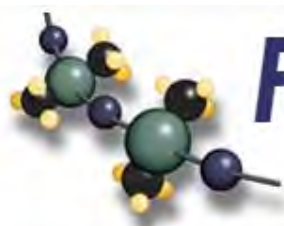
Abbreviations and Acronyms

ACGIH – American Conference of Governmental Industrial Hygienists
ADN – European Agreement Concerning the International Carriage of Dangerous Goods by Inland Waterways
ADR – European Agreement Concerning the International Carriage of Dangerous Goods by Road
ATE – Acute Toxicity Estimate
BCF – Bioconcentration Factor
BEI – Biological Exposure Indices (BEI)
BOD – Biochemical Oxygen Demand
CAS No. – Chemical Abstracts Service Number
CLP – Classification, Labeling and Packaging Regulation (EC) No 1272/2008
COD – Chemical Oxygen Demand
EC – European Community
EC50 – Median Effective Concentration
EEC – European Economic Community
EINECS – European Inventory of Existing Commercial Chemical Substances
EmS-No. (Fire) – IMDG Emergency Schedule Fire
EmS-No. (Spillage) – IMDG Emergency Schedule Spillage
EU – European Union
ErC50 – EC50 in Terms of Reduction Growth Rate
GHS – Globally Harmonized System of Classification and Labeling of Chemicals
IARC – International Agency for Research on Cancer
IATA – International Air Transport Association
IBC Code – International Bulk Chemical Code
IMDG – International Maritime Dangerous Goods
IPRV – Ilgalaikio Poveikio Ribinis Dydis
IOELV – Indicative Occupational Exposure Limit Value
LC50 – Median Lethal Concentration
LD50 – Median Lethal Dose
LOAEL – Lowest Observed Adverse Effect Level
LOEC – Lowest-Observed-Effect Concentration
Log Koc – Soil Organic Carbon-water Partitioning Coefficient
Log Kow – Octanol/water Partition Coefficient
Log Pow – Ratio of the equilibrium concentration (C) of a dissolved substance in a two-phase system consisting of two largely immiscible solvents, in this case octanol and water
MAK – Maximum Workplace Concentration/Maximum Permissible Concentration
MARPOL – International Convention for the Prevention of Pollution

NDS – Najwyższe Dopuszczalne Steżenie
NDSch – Najwyższe Dopuszczalne Steżenie Chwilowe
NDSP – Najwyższe Dopuszczalne Steżenie Pulapowe
NOAEL – No-Observed Adverse Effect Level
NOEC – No-Observed Effect Concentration
NRD – Nevirytinas Ribinis Dydis
NTP – National Toxicology Program
OEL – Occupational Exposure Limits
PBT – Persistent, Bioaccumulative and Toxic
PEL – Permissible Exposure Limit
pH – Potential Hydrogen
REACH – Registration, Evaluation, Authorisation, and Restriction of Chemicals
RID – Regulations Concerning the International Carriage of Dangerous Goods by Rail
SADT – Self Accelerating Decomposition Temperature
SDS – Safety Data Sheet
STEL – Short Term Exposure Limit
STOT – Specific Target Organ Toxicity
TA-Luft – Technische Anleitung zur Reinhaltung der Luft
TEL TRK – Technical Guidance Concentrations
ThOD – Theoretical Oxygen Demand
TLM – Median Tolerance Limit
TLV – Threshold Limit Value
TPRD – Trumpalaikio Poveikio Ribinis Dydis
TRGS 510 – Technische Regel für Gefahrstoffe 510 – Lagerung von Gefahrstoffen in ortsbeweglichen Behältern
TRGS 552 – Technische Regeln für Gefahrstoffe – N-Nitrosamine
TRGS 900 – Technische Regel für Gefahrstoffe 900 – Arbeitsplatzgrenzwerte
TRGS 903 – Technische Regel für Gefahrstoffe 903 – Biologische Grenzwerte
TSCA – Toxic Substances Control Act
TWA – Time Weighted Average
VOC – Volatile Organic Compounds
VLA-EC – Valor Límite Ambiental Exposición de Corta Duración
VLA-ED – Valor Límite Ambiental Exposición Diaria
VLE – Valeur Limite D'exposition
VME – Valeur Limite De Moyenne Exposition
vPvB – Very Persistent and Very Bioaccumulative
WEL – Workplace Exposure Limit
WGK – Wassergefährdungsklasse

Nusil EU GHS SDS

The information provided in this Safety Data Sheet (SDS) was prepared based on data believed to be accurate as of the date of this SDS. TO THE GREATEST EXTENT PERMITTED BY LAW, NUSIL TECHNOLOGY LLC AND ITS AFFILIATED COMPANIES ("NUSIL") EXPRESSLY DISCLAIMS ANY AND ALL REPRESENTATIONS AND WARRANTIES REGARDING THE INFORMATION CONTAINED HEREIN INCLUDING, WITHOUT LIMITATION, AS TO ACCURACY, COMPLETENESS, FITNESS FOR PURPOSE OR USE, MERCHANTABILITY, NON-INFRINGEMENT, PERFORMANCE, SAFETY, SUITABILITY AND STABILITY. This SDS is intended as a guide to the appropriate use, handling, storage and disposal of the product to which it relates by properly trained personnel, and is not intended to be comprehensive. Users of NuSil's products are advised to perform their own tests and to exercise their own judgment to determine the safety, suitability and appropriate use, handling, storage and disposal of each product and product combination for their own purposes and uses. TO THE GREATEST EXTENT PERMITTED BY LAW, NUSIL DISCLAIMS LIABILITY FOR, AND BY USING NUSIL'S PRODUCTS PURCHASER AGREES THAT UNDER NO CIRCUMSTANCES SHALL NUSIL BE LIABLE FOR, SPECIAL, INDIRECT, INCIDENTAL, PUNITIVE OR CONSEQUENTIAL DAMAGES OF ANY TYPE OR KIND, INCLUDING WITHOUT LIMITATION, FOR LOSS OF PROFITS, REPUTATIONAL DAMAGE, PRODUCT RECALL OR BUSINESS INTERRUPTION.



Polymer Systems
Technology Limited

Silicone Sales & Services UK - Ireland - Benelux

© 2022 - **Polymer Systems Technology Limited™**

Unit 2. Network 4. Cressex Business Park,
Lincoln Road, High Wycombe, Bucks. HP12 3RF

tel: +44 (0) 1494 446610

web: <https://www.silicone-polymers.com>

email: sales@silicone-polymers.co.uk

