

R-1008-3

Safety Data Sheet

According to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830
Revision date: 05/06/2020 Date of issue: 11/07/2014

Version: 4.0

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

1.1. Product Identifier

Product form	Mixture
Product Name	R-1008-3
Synonyms	Silicone Ink

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
Skin Irrit. 2 H315
Eye Irrit. 2 H319
Skin Sens. 1 H317
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

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Hazardous Ingredients	2-Butanone, O,O',O''-(methylsilylydyne)trioxime; Dibutyltin dilaurate; Reaction mass of ethylbenzene and xylene
Hazard Statements (CLP)	H226 - Flammable liquid and vapour. H304 - May be fatal if swallowed and enters airways. H315 - Causes skin irritation. H317 - May cause an allergic skin reaction. H319 - Causes serious eye irritation. H335 - May cause respiratory irritation. H373 - May cause damage to 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 mist, spray, vapours P264 - Wash hands, forearms, and exposed areas thoroughly after handling P271 - Use only outdoors or in a well-ventilated area. P272 - Contaminated work clothing should not be allowed out of the workplace. P280 - Wear eye protection, protective clothing, protective gloves P301+P310 - IF SWALLOWED: Immediately call a POISON CENTER or doctor 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. P333+P313 - If skin irritation or rash 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 appropriate media (see section 5) to extinguish P403+P233+P235 - Store in a well-ventilated place. Keep container tightly closed. 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.

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2.3. Other Hazards

Other Hazards Not Contributing to the Classification Exposure may aggravate pre-existing eye, skin, or respiratory 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	10 - 30	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
C.I. Pigment Red 108	(CAS-No.) 58339-34-7 (EC-No.) 261-218-1	20 - 30	Not classified
2-Butanone, O,O',O''-(methylsilyldyne)trioxime	(CAS-No.) 22984-54-9 (EC-No.) 245-366-4	< 15	Eye Irrit. 2, H319 Skin Sens. 1B, H317 STOT RE 2, H373
Dibutyltin dilaurate	(CAS-No.) 77-58-7 (EC-No.) 201-039-8 (EC Index-No.) 050-030-00-3	< 0.3	Skin Corr. 1C, H314 Eye Dam. 1, H318 Skin Sens. 1, H317 Muta. 2, H341 Repr. 1B, H360 STOT SE 1, H370 STOT RE 1, H372 Aquatic Acute 1, H400 Aquatic Chronic 1, H410

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. Obtain medical attention if breathing difficulty persists.

First-Aid Measures After Skin Contact Immediately remove contaminated clothing. Immediately drench affected area with water for at least 15 minutes. Obtain medical attention if irritation/rash develops or persists.

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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. Obtain medical attention.
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	May cause damage to organs through prolonged or repeated exposure. Skin sensitisation. Causes skin irritation. Causes serious eye irritation. May be fatal if swallowed and enters airways. May cause respiratory irritation.
Symptoms/Effects After Inhalation	May cause irritation to the respiratory tract, sneezing, coughing, burning sensation of throat with constricting sensation of the larynx and difficulty in breathing.
Symptoms/Effects After Skin Contact	May cause an allergic skin reaction. Redness, pain, swelling, itching, burning, dryness, and dermatitis.
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 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	Dry chemical powder, alcohol-resistant foam, carbon dioxide (CO ₂). Water may be ineffective but water should be used to keep fire-exposed container cool.
Unsuitable Extinguishing Media	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.
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 dioxide. Carbon monoxide. Silicon oxides. Hydrocarbons.

5.3. Advice for Firefighters

Precautionary Measures Fire	Exercise caution when fighting any chemical fire.
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.
Other Information	Do not allow run-off from fire fighting to enter drains or water courses.

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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. Keep away from heat, hot surfaces, sparks, open flames, and other ignition sources. No smoking. Use special care to avoid static electric charges. Do not breathe vapour, mist or spray.

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

Prevent entry to sewers and public waters. Avoid release to the environment.

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. Clean up spills immediately and dispose of waste safely.

Methods For Cleaning Up

Transfer spilled material to a suitable container for disposal.

Contact competent authorities after a spill. Absorb and/or contain spill with inert material. Do not take up in combustible material such as: saw dust or cellulosic material. Use only non-sparking tools.

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

Precautions for Safe Handling

Handle empty containers with care because residual vapours are flammable.

Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work. Take precautionary measures against static discharge. Use only non-sparking tools. Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Do not breathe vapours, mist, spray. Avoid contact with skin, eyes and clothing.

Hygiene Measures

Handle in accordance with good industrial hygiene and safety procedures.

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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)

As a marking ink for silicone rubber parts and other components where the coating must maintain long term stability. For professional use only.

SECTION 8: Exposure Controls/Personal Protection

8.1. Control Parameters

Xylenes (o-, m-, p- isomers)		
EU	IOELV TWA (mg/m ³)	221 mg/m ³ (pure)
EU	IOELV TWA (ppm)	50 ppm (pure)
EU	IOELV STEL (mg/m ³)	442 mg/m ³ (pure)
EU	IOELV STEL (ppm)	100 ppm (pure)
EU	Notes	Possibility of significant uptake through the skin (pure)
Austria	MAK (mg/m ³)	221 mg/m ³ (all isomers)
Austria	MAK (ppm)	50 ppm (all isomers)
Austria	MAK Short time value (mg/m ³)	442 mg/m ³
Austria	MAK Short time value (ppm)	100 ppm
Belgium	Limit value (mg/m ³)	221 mg/m ³
Belgium	Limit value (ppm)	50 ppm
Belgium	Short time value (mg/m ³)	442 mg/m ³
Belgium	Short time value (ppm)	100 ppm
Belgium	OEL chemical category (BE)	Skin, Skin notation pure
Bulgaria	OEL TWA (mg/m ³)	221 mg/m ³ (pure)
Bulgaria	OEL TWA (ppm)	50 ppm (pure)
Bulgaria	OEL STEL (mg/m ³)	442 mg/m ³ (pure)
Bulgaria	OEL STEL (ppm)	100 ppm (pure)
Croatia	GVI (granična vrijednost izloženosti) (mg/m ³)	221 mg/m ³
Croatia	GVI (granična vrijednost izloženosti) (ppm)	50 ppm
Croatia	KGVI (kratkotrajna granična vrijednost izloženosti) (mg/m ³)	442 mg/m ³
Croatia	KGVI (kratkotrajna granična vrijednost izloženosti) (ppm)	100 ppm
Croatia	OEL chemical category (HR)	Skin notation

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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/m ³)	221 mg/m ³
Cyprus	OEL TWA (ppm)	50 ppm
Cyprus	OEL STEL (mg/m ³)	442 mg/m ³
Cyprus	OEL STEL (ppm)	100 ppm
Cyprus	OEL chemical category (CY)	Skin-potential for cutaneous absorption
Czech Republic	Expoziční limity (PEL) (mg/m ³)	200 mg/m ³
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/m ³)	109 mg/m ³ (Xylene, all isomers)
Denmark	Grænseværdie (langvarig) (ppm)	25 ppm (Xylene, all isomers)
Estonia	OEL TWA (mg/m ³)	200 mg/m ³
Estonia	OEL TWA (ppm)	50 ppm
Estonia	OEL STEL (mg/m ³)	450 mg/m ³
Estonia	OEL STEL (ppm)	100 ppm
Estonia	OEL chemical category (ET)	Skin notation
Finland	HTP-arvo (8h) (mg/m ³)	220 mg/m ³
Finland	HTP-arvo (8h) (ppm)	50 ppm
Finland	HTP-arvo (15 min)	440 mg/m ³
Finland	HTP-arvo (15 min) (ppm)	100 ppm
Finland	OEL chemical category (FI)	Potential for cutaneous absorption
Finland	Finland - BLV	Parameter: Methylhippuric acid - 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

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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
Latvia	OEL chemical category (LV)	skin - potential for cutaneous exposure
Lithuania	IPRV (mg/m ³)	221 mg/m ³ (mixed isomers, pure)
Lithuania	IPRV (ppm)	50 ppm (mixed isomers, pure)
Lithuania	TPRV (mg/m ³)	442 mg/m ³ (mixed isomers, pure)
Lithuania	TPRV (ppm)	100 ppm (mixed isomers, pure)
Lithuania	OEL chemical category (LT)	Skin notation

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Luxembourg	OEL TWA (mg/m ³)	221 mg/m ³
Luxembourg	OEL TWA (ppm)	50 ppm
Luxembourg	OEL STEL (mg/m ³)	442 mg/m ³
Luxembourg	OEL STEL (ppm)	100 ppm
Luxembourg	OEL chemical category (LU)	Possibility of significant uptake through the skin
Malta	OEL TWA (mg/m ³)	221 mg/m ³ (pure)
Malta	OEL TWA (ppm)	50 ppm (pure)
Malta	OEL STEL (mg/m ³)	442 mg/m ³ (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/m ³)	210 mg/m ³
Netherlands	Grenswaarde TGG 15MIN (mg/m ³)	442 mg/m ³
Norway	Grenseverdier (AN) (mg/m ³)	108 mg/m ³
Norway	Grenseverdier (AN) (ppm)	25 ppm
Norway	Grenseverdier (Korttidsverdi) (mg/m ³)	135 mg/m ³ (value calculated)
Norway	Grenseverdier (Korttidsverdi) (ppm)	37,5 ppm (value calculated)
Norway	OEL chemical category (NO)	Skin notation
Poland	NDS (mg/m ³)	100 mg/m ³ (mixture of isomers)
Poland	NDSch (mg/m ³)	200 mg/m ³ (mixture of isomers)
Portugal	OEL TWA (mg/m ³)	221 mg/m ³ (indicative limit value)
Portugal	OEL TWA (ppm)	50 ppm (indicative limit value)
Portugal	OEL STEL (mg/m ³)	442 mg/m ³ (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/m ³)	221 mg/m ³ (pure)
Romania	OEL TWA (ppm)	50 ppm (pure)
Romania	OEL STEL (mg/m ³)	442 mg/m ³ (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/m ³)	221 mg/m ³
Slovakia	NPHV (priemerná) (ppm)	50 ppm
Slovakia	NPHV (Hraničná) (mg/m ³)	442 mg/m ³
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

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		acid - Medium: urine - Sampling time: end of exposure or work shift
Slovenia	OEL TWA (mg/m ³)	221 mg/m ³
Slovenia	OEL TWA (ppm)	50 ppm
Slovenia	OEL STEL (mg/m ³)	442 mg/m ³
Slovenia	OEL STEL (ppm)	100 ppm
Slovenia	OEL chemical category (SI)	Potential for cutaneous absorption
Spain	VLA-ED (mg/m ³)	221 mg/m ³ (indicative limit value)
Spain	VLA-ED (ppm)	50 ppm (indicative limit value)
Spain	VLA-EC (mg/m ³)	442 mg/m ³
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/m ³)	221 mg/m ³ (Xylene)
Sweden	nivågränsvärde (NVG) (ppm)	50 ppm (Xylene)
Sweden	kortidsvärde (KTV) (mg/m ³)	442 mg/m ³ (Xylene)
Sweden	kortidsvärde (KTV) (ppm)	100 ppm (Xylene)
Sweden	OEL chemical category (SE)	Skin notation
Switzerland	KZGW (mg/m ³)	870 mg/m ³
Switzerland	KZGW (ppm)	200 ppm
Switzerland	MAK (mg/m ³)	435 mg/m ³
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/m ³)	220 mg/m ³
United Kingdom	WEL TWA (ppm)	50 ppm
United Kingdom	WEL STEL (mg/m ³)	441 mg/m ³
United Kingdom	WEL STEL (ppm)	100 ppm
United Kingdom	WEL chemical category	Potential for cutaneous absorption

Cadmium compounds

Austria	TEL TRK (mg/m ³)	0,03 mg/m ³ (battery manufacturing, thermal productions of Zinc, Lead and Copper productions, welding of Cadmium containing alloys-inhalable fraction (Cadmium) 0,015 mg/m ³ (all others-inhalable fraction (Cadmium))
Austria	OEL chemical category (AT)	Group A2 Carcinogen
Belgium	Limit value (mg/m ³)	0,002 mg/m ³ (alveolar particulates) 0,01 mg/m ³ (inhalable particulate)
Belgium	OEL chemical category (BE)	Carcinogen

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Croatia	GVI (granična vrijednost izloženosti) (mg/m ³)	0,025 mg/m ³ (non-pyrophoric)
Czech Republic	Expoziční limity (PEL) (mg/m ³)	0,05 mg/m ³ (inhalable fraction of aerosol)
Czech Republic	OEL chemical category (CZ)	Potential for cutaneous absorption
Finland	HTP-arvo (8h) (mg/m ³)	0,004 mg/m ³ (respirable dust)
Finland	Finland - BLV	20 nmol/L Parameter: Cadmium - Medium: urine - Sampling time: at the end of a working week; time of day does not matter
France	VME (mg/m ³)	0,05 mg/m ³
France	OEL chemical category (FR)	Carcinogen categories 1A, 1B, 2, Mutagen categories 1A, 1B, 2, Reproductive Toxin categories 1A, 1B, 2
Greece	OEL TWA (mg/m ³)	0,025 mg/m ³
Greece	OEL STEL (mg/m ³)	0,1 mg/m ³
Ireland	OEL (8 hours ref) (mg/m ³)	0,01 mg/m ³ 0,002 mg/m ³ (respirable fraction)
Ireland	OEL (15 min ref) (mg/m ³)	0,03 mg/m ³ (calculated) 0,006 mg/m ³ (calculated-respirable fraction)
Ireland	OEL chemical category (IE)	Carc1B as Cd
Portugal	OEL TWA (mg/m ³)	0,002 mg/m ³ (respirable fraction)
Portugal	OEL chemical category (PT)	A2 - Suspected Human Carcinogen
Romania	OEL TWA (mg/m ³)	0,05 mg/m ³
Romania	OEL chemical category (RO)	C1B
Spain	VLA-ED (mg/m ³)	0,01 mg/m ³ (except Cadmium sulphoselenide and Cadmium sulfide mixed with Zinc and Mercury-inhalable fraction) 0,002 mg/m ³ (except Cadmium sulphoselenide and Cadmium sulfide mixed with Zinc and Mercury-respirable fraction)
Switzerland	MAK (mg/m ³)	0,015 mg/m ³ (inhalable dust) 0,004 mg/m ³ (respirable dust)
Switzerland	OEL chemical category (CH)	Category C1B carcinogen carcinogenic with threshold value, Category 2 developmental toxin, Category 2 mutagen, Category 2 reproductive toxin, Skin notation
Switzerland	Switzerland - BLV	5 µg/g creatinine Parameter: Cadmium - Medium: urine - Sampling time: no restrictions (carcinogen substances with thresholds, respirable fractions) 5 µg/g creatinine Parameter: Cadmium - Medium: urine - Sampling

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		time: no restrictions (carcinogen substances with thresholds, inhalable fractions)
United Kingdom	WEL TWA (mg/m ³)	0,025 mg/m ³ (fume)
United Kingdom	WEL STEL (mg/m ³)	0,075 mg/m ³ (calculated-fume)
Tin organic compounds		
Austria	MAK (mg/m ³)	0,1 mg/m ³ (except tri-n-Butyltin compounds-inhalable fraction)
Austria	MAK Short time value (mg/m ³)	0,2 mg/m ³ (except Tri-n-butyltin compounds-inhalable fraction)
Austria	OEL chemical category (AT)	Skin notation except Tri-n-butyltin compounds
Belgium	Limit value (mg/m ³)	0,1 mg/m ³
Belgium	Short time value (mg/m ³)	0,2 mg/m ³
Belgium	OEL chemical category (BE)	Skin
Bulgaria	OEL TWA (mg/m ³)	0,1 mg/m ³
Croatia	GVI (granična vrijednost izloženosti) (mg/m ³)	0,1 mg/m ³ (except Cyhexatin)
Croatia	KGVI (kratkotrajna granična vrijednost izloženosti) (mg/m ³)	0,2 mg/m ³ (except Cyhexatin)
Czech Republic	Expoziční limity (PEL) (mg/m ³)	0,1 mg/m ³
Czech Republic	OEL chemical category (CZ)	Potential for cutaneous absorption
Denmark	Grænseværdie (langvarig) (mg/m ³)	0,1 mg/m ³ (except Tri-n-butyltin compounds)
Estonia	OEL TWA (mg/m ³)	0,1 mg/m ³
Estonia	OEL STEL (mg/m ³)	0,2 mg/m ³
Estonia	OEL chemical category (ET)	Skin notation
Finland	HTP-arvo (8h) (mg/m ³)	0,1 mg/m ³
Finland	HTP-arvo (15 min)	0,3 mg/m ³
Finland	OEL chemical category (FI)	Potential for cutaneous absorption
France	VLE (mg/m ³)	0,2 mg/m ³
France	VME (mg/m ³)	0,1 mg/m ³
Greece	OEL TWA (mg/m ³)	0,1 mg/m ³
Greece	OEL STEL (mg/m ³)	0,2 mg/m ³
Greece	OEL chemical category (GR)	skin - potential for cutaneous absorption
Hungary	AK-érték	0,1 mg/m ³
Hungary	CK-érték	0,4 mg/m ³
Hungary	OEL chemical category (HU)	Potential for cutaneous absorption
Ireland	OEL (8 hours ref) (mg/m ³)	0,1 mg/m ³
Ireland	OEL (15 min ref) (mg/m ³)	0,2 mg/m ³
Lithuania	IPRV (mg/m ³)	0,1 mg/m ³
Lithuania	TPRV (mg/m ³)	0,2 mg/m ³
Lithuania	OEL chemical category (LT)	Skin notation
Norway	Grenseverdier (AN) (mg/m ³)	0,1 mg/m ³

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Norway	Grenseverdier (Korttidsverdi) (mg/m ³)	0,3 mg/m ³ (value calculated)
Norway	OEL chemical category (NO)	Skin notation
Portugal	OEL TWA (mg/m ³)	0,1 mg/m ³
Portugal	OEL STEL (mg/m ³)	0,2 mg/m ³
Portugal	OEL chemical category (PT)	A4 - Not Classifiable as a Human Carcinogen, skin - potential for cutaneous exposure
Romania	OEL TWA (mg/m ³)	0,05 mg/m ³
Romania	OEL STEL (mg/m ³)	0,15 mg/m ³
Slovakia	NPHV (priemerná) (mg/m ³)	0,1 mg/m ³
Slovakia	NPHV (Hraničná) (mg/m ³)	0,2 mg/m ³
Slovakia	OEL chemical category (SK)	Potential for cutaneous absorption
Spain	VLA-ED (mg/m ³)	0,1 mg/m ³
Spain	VLA-EC (mg/m ³)	0,2 mg/m ³
Spain	OEL chemical category (ES)	skin - potential for cutaneous absorption
Sweden	nivågränsvärde (NVG) (mg/m ³)	0,1 mg/m ³ (total dust)
Sweden	kortidsvärde (KTV) (mg/m ³)	0,2 mg/m ³ (total dust)
Sweden	OEL chemical category (SE)	Skin notation
Switzerland	KZGW (mg/m ³)	0,2 mg/m ³ (inhalable dust)
Switzerland	MAK (mg/m ³)	0,1 mg/m ³ (inhalable dust)
Switzerland	OEL chemical category (CH)	Skin notation
United Kingdom	WEL TWA (mg/m ³)	0,1 mg/m ³ (except Cyhexatin)
United Kingdom	WEL STEL (mg/m ³)	0,2 mg/m ³ (except Cyhexatin)
United Kingdom	WEL chemical category	Potential for cutaneous absorption except Cyhexatin

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

Personal Protective Equipment



Materials for Protective Clothing

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

Hand Protection

Wear protective gloves.

Eye Protection

Chemical safety goggles.

Skin and Body Protection

Wear suitable protective clothing.

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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	Red
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 (81 °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
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	10 - 30 %
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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.

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10.6. Hazardous Decomposition Products

None expected under normal conditions of use.

SECTION 11: Toxicological Information

11.1. Information On Toxicological Effects

Acute Toxicity Not classified (Based on available data, the classification criteria are not met)

2-Butanone, O,O',O''-(methylsilyldiylidene)trioxime (22984-54-9)	
LD50 Oral Rat	2463 mg/kg
LD50 Dermal Rat	> 2000 mg/kg
Dibutyltin dilaurate (77-58-7)	
LD50 Oral	175 mg/kg
LD50 Dermal Rat	> 2 g/kg
Reaction mass of ethylbenzene and xylene (REACH Registration No.) 01-2119539452-40-0053	
LD50 Oral Rat	3523 mg/kg
LC50 Inhalation Rat	6700 ppm/4h
ATE CLP (oral)	3523 mg/kg bodyweight
ATE CLP (dermal)	1100 mg/kg bodyweight
ATE CLP (gases)	6700 ppmv/4h
ATE CLP (vapours)	11 mg/l/4h

Skin Corrosion/Irritation

Causes skin irritation.

Eye Damage/Irritation

Causes serious eye irritation.

Respiratory or Skin Sensitization

May cause an allergic skin reaction.

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 through prolonged
or repeated exposure.

Aspiration Hazard

May be fatal if swallowed and enters airways.

SECTION 12: Ecological Information

12.1. Toxicity

Ecology - General

Toxic to aquatic life.

2-Butanone, O,O',O''-(methylsilyldiylidene)trioxime (22984-54-9)	
EC50 Daphnia 1	120 mg/l (Exposure time: 48h - Species: Daphnia magna)
Dibutyltin dilaurate (77-58-7)	
EC50 Daphnia 1	0,463 mg/l (Daphnia magna)

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ADR	IMDG	IATA	ADN	RID
	Marine pollutant : 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 no REACH substances with Annex XVII restrictions

Contains no substance on the REACH candidate list

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	Identification of the substance/mixture and of the company/undertaking	Modified	05/06/2020
2	Hazards identification	Modified	05/06/2020
3	Composition/information on ingredients	Modified	05/06/2020
4	First aid measures	Modified	05/06/2020
8	Exposure controls/personal protection	Modified	05/06/2020
9	Physical and chemical properties	Modified	05/06/2020
10	Stability and reactivity	Modified	05/06/2020
11	Toxicological information	Modified	05/06/2020
15	Regulatory information	Modified	05/06/2020

Date of Preparation or Latest Revision 05/06/2020

Revision

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

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Full Text of H- and EUH-statements:

Acute Tox. 4 (Dermal)	Acute toxicity (dermal), Category 4
Acute Tox. 4 (Inhalation)	Acute toxicity (inhal.), Category 4
Acute Tox. 4 (Inhalation:vapour)	Acute toxicity (inhalation:vapour) Category 4
Aquatic Acute 1	Hazardous to the aquatic environment — Acute Hazard, Category 1
Aquatic Chronic 1	Hazardous to the aquatic environment — Chronic Hazard, Category 1
Asp. Tox. 1	Aspiration hazard, Category 1
Eye Dam. 1	Serious eye damage/eye irritation, Category 1
Eye Irrit. 2	Serious eye damage/eye irritation, Category 2
Flam. Liq. 3	Flammable liquids, Category 3
Muta. 2	Germ cell mutagenicity, Category 2
Repr. 1B	Reproductive toxicity, Category 1B
Skin Corr. 1C	Skin corrosion/irritation, Category 1C
Skin Irrit. 2	Skin corrosion/irritation, Category 2
Skin Sens. 1	Skin sensitisation, Category 1
Skin Sens. 1B	Skin sensitisation, category 1B
STOT RE 1	Specific target organ toxicity — Repeated exposure, Category 1
STOT RE 2	Specific target organ toxicity — Repeated exposure, Category 2
STOT SE 1	Specific target organ toxicity — Single exposure, Category 1
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.
H314	Causes severe skin burns and eye damage.
H315	Causes skin irritation.
H317	May cause an allergic skin reaction.
H318	Causes serious eye damage.
H319	Causes serious eye irritation.
H332	Harmful if inhaled.
H335	May cause respiratory irritation.
H341	Suspected of causing genetic defects.
H360	May damage fertility or the unborn child.
H370	Causes damage to organs.
H372	Causes damage to organs through prolonged or repeated exposure.
H373	May cause damage to organs through prolonged or repeated exposure.
H400	Very toxic to aquatic life.
H410	Very toxic to aquatic life with long lasting effects.

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

NDS - Najwyższe Dopuszczalne Steżenie
NDSCh - Najwyższe Dopuszczalne Steżenie Chwilowe
NDSp - Najwyższe Dopuszczalne Steżenie Pulapowe
NOAEL - No-Observed Adverse Effect Level

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Goods by Road	NOEC - No-Observed Effect Concentration
ATE - Acute Toxicity Estimate	NRD - Nevirsytinas Ribinis Dydis
BCF - Bioconcentration Factor	NTP - National Toxicology Program
BEI - Biological Exposure Indices (BEI)	OEL - Occupational Exposure Limits
BOD - Biochemical Oxygen Demand	PBT - Persistent, Bioaccumulative and Toxic
CAS No. - Chemical Abstracts Service Number	PEL - Permissible Exposure Limit
CLP - Classification, Labeling and Packaging Regulation (EC) No 1272/2008	pH - Potential Hydrogen
COD - Chemical Oxygen Demand	REACH - Registration, Evaluation, Authorisation, and Restriction of Chemicals
EC - European Community	RID - Regulations Concerning the International Carriage of Dangerous Goods by Rail
EC50 - Median Effective Concentration	SADT - Self Accelerating Decomposition Temperature
EEC - European Economic Community	SDS - Safety Data Sheet
EINECS - European Inventory of Existing Commercial Chemical Substances	STEL - Short Term Exposure Limit
EmS-No. (Fire) - IMDG Emergency Schedule Fire	STOT - Specific Target Organ Toxicity
EmS-No. (Spillage) - IMDG Emergency Schedule Spillage	TA-Luft - Technische Anleitung zur Reinhaltung der Luft
EU - European Union	TEL TRK - Technical Guidance Concentrations
ErC50 - EC50 in Terms of Reduction Growth Rate	ThOD - Theoretical Oxygen Demand
GHS - Globally Harmonized System of Classification and Labeling of Chemicals	TLM - Median Tolerance Limit
IARC - International Agency for Research on Cancer	TLV - Threshold Limit Value
IATA - International Air Transport Association	TPRD - Trumpalaikio Poveikio Ribinis Dydis
IBC Code - International Bulk Chemical Code	TRGS 510 - Technische Regel für Gefahrstoffe 510 - Lagerung von Gefahrstoffen in ortsbeweglichen Behältern
IMDG - International Maritime Dangerous Goods	TRGS 552 - Technische Regeln für Gefahrstoffe - N-Nitrosamine
IPRV - Ilgalaikio Poveikio Ribinis Dydis	TRGS 900 - Technische Regel für Gefahrstoffe 900 - Arbeitsplatzgrenzwerte
IOELV - Indicative Occupational Exposure Limit Value	TRGS 903 - Technische Regel für Gefahrstoffe 903 - Biologische Grenzwerte
LC50 - Median Lethal Concentration	TSCA - Toxic Substances Control Act
LD50 - Median Lethal Dose	TWA - Time Weighted Average
LOAEL - Lowest Observed Adverse Effect Level	VOC - Volatile Organic Compounds
LOEC - Lowest-Observed-Effect Concentration	VLA-EC - Valor Límite Ambiental Exposición de Corta Duración
Log K _{oc} - Soil Organic Carbon-water Partitioning Coefficient	VLA-ED - Valor Límite Ambiental Exposición Diaria
Log K _{ow} - Octanol/water Partition Coefficient	VLE - Valeur Limite D'exposition
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	VME - Valeur Limite De Moyenne Exposition
MAK - Maximum Workplace Concentration/Maximum Permissible Concentration	vPvB - Very Persistent and Very Bioaccumulative
MARPOL - International Convention for the Prevention of Pollution	WEL - Workplace Exposure Limit
	WGK - Wassergefährdungsklasse

Nusil EU GHS SDS

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