MED-6613-1 Part A

Safety Data Sheet

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

Revision date:	Date of issue:	Version: 2.0
28/09/2016	13/10/2014	

SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1. Product identifier

Product form : Mixture

Product Name : MED-6613-1 Part A

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 LLC
1050 Cindy Lane
Carpinteria, California 93013
USA
(805) 684-8780
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)

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
Asp. Tox. 1	H304

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

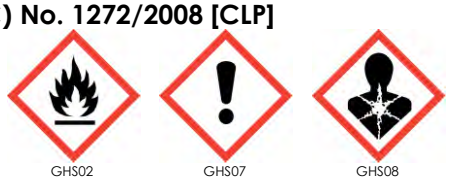
Adverse physicochemical, human health and environmental effects

No additional information available

2.2. Label elements

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

Hazard pictograms (CLP) :



GHS02 GHS07 GHS08

Signal word (CLP) : Danger

Hazardous ingredients : Xylenes (o-, m-, p- isomers)

Hazard statements (CLP) : H226 - Flammable liquid and vapour
H304 - May be fatal if swallowed and enters airways
H315 - Causes skin irritation
H319 - Causes serious eye irritation

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/bond container and receiving equipment
P241 - Use explosion-proof electrical, lighting, ventilating equipment
P242 - Use only non-sparking tools
P243 - Take precautionary measures against static discharge
P264 - Wash hands, forearms and face thoroughly after handling
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/shower
P305+P351+P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing
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 appropriate media to extinguish
P403+P235 - Store in a well-ventilated place. Keep cool
P405 - Store locked up
P501 - Dispose of contents/container in accordance with local, regional, national, and international regulations

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. Substance

Not applicable

3.2. Mixture

Name	Product identifier	%	Classification according to Regulation (EC) No. 1272/2008 [CLP]
Xylenes (o-, m-, p-isomers)	(CAS No) 1330-20-7 (EC no) 215-535-7 (EC index no) 601-022-00-9	40 - 45	Flam. Liq. 3, H226 Acute Tox. 4 (Dermal), H312 Acute Tox. 4 (Inhalation:vapour), H332 Skin Irrit. 2, H315 Eye Irrit. 2, H319 Asp. Tox. 1, H304
Titanium dioxide	(CAS No) 13463-67-7 (EC no) 236-675-5	25 - 30	Not classified
Siloxanes and Silicones, dimethyl, vinyl group-terminated	(CAS No) 68083-19-2	15 - 20	Skin Irrit. 2, H315 Eye Irrit. 2, H319
Glycidoxypropyltrimethoxysilane	(CAS No) 2530-83-8 (EC no) 219-784-2	< 1,5	Eye Dam. 1, H318
1-Butanol, titanium(4+) salt	(CAS No) 5593-70-4 (EC no) 227-006-8	< 1,5	Flam. Liq. 3, H226 Skin Irrit. 2, H315 Eye Dam. 1, H318 STOT SE 3, H336 STOT SE 3, H335

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 : Remove contaminated clothing. Drench affected area with water for at least 15 minutes. Obtain medical attention if irritation develops or persists.

First-aid measures after eye contact : Rinse cautiously 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/injuries : Causes serious eye irritation. Causes skin irritation. May be fatal if swallowed and enters airways.

Symptoms/injuries after inhalation : High concentrations may cause central nervous system depression such as dizziness, vomiting, numbness, drowsiness, headache, and similar narcotic symptoms.

Symptoms/injuries after skin contact : Redness, pain, swelling, itching, burning, dryness, and dermatitis.

Symptoms/injuries after eye contact : Contact causes severe irritation with redness and swelling of the conjunctiva.

Symptoms/injuries after ingestion : Aspiration into the lungs can occur during ingestion or vomiting and may cause lung injury.

Chronic symptoms : None expected under normal conditions of use.

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 : Highly 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.

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.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

General measures	: Avoid breathing (vapour, mist, spray). 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.

6.1.1. For non-emergency personnel

Protective equipment	: Use appropriate personal protection 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	: Ventilate area. Eliminate ignition sources. 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.

6.2. Environmental precautions

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

6.3. Methods and material 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.
Methods for cleaning up	: Clean up spills immediately and dispose of waste safely. 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	: Handle empty containers with care because residual vapours are flammable.
Precautions for safe handling	: Take precautionary measures against static discharge. Use only non-sparking tools. Avoid contact with eyes, skin and clothing. Avoid breathing vapours, mist, spray.
Hygiene measures	: Handle in accordance with good industrial hygiene and safety procedures. Wash hands and other exposed areas with mild soap and water before eating, drinking, or smoking and again when leaving work.

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 in a well-ventilated place. Keep container tightly closed. Keep in fireproof place.
Incompatible products	: 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) (1330-20-7)		
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)
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 (all isomers)
Austria	MAK Short time value (ppm)	100 ppm (all isomers)
Austria	OEL chemical category (AT)	Skin notation
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)	221,0 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)
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 - BEI	1,50 mg/l Parameter: Xylene - Medium: blood - Sampling time: at the end of the shift (Alcohol before exposure to Xylene raises occurrence) 1,50 g/g Kreatinin Parameter: Methylhippuric acid - Medium: blood - Sampling time: at the end of the shift (For all results that are expressed as Creatinine, Creatinine concentration <0.5 g/L and >3.0 g/L should not be considered)
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
France	VLE (mg/m³)	442 mg/m³ (restrictive limit)
France	VLE (ppm)	100 ppm (restrictive limit)
France	VME (mg/m³)	221 mg/m³ (restrictive limit)

Xylenes (o-, m-, p- isomers) (1330-20-7)		
France	VME (ppm)	50 ppm (restrictive limit)
France	OEL chemical category (FR)	Risk of cutaneous absorption
France	France - BEI	1500 mg/g Kreatinin Parameter: Methylhippuric acid - Medium: urine - Sampling time: end of shift
Germany	TRGS 900 Occupational exposure limit value (mg/m³)	440 mg/m³ (all isomers)
Germany	TRGS 900 Occupational exposure limit value (ppm)	100 ppm (all isomers)
Germany	TRGS 903 (BGW)	1,5 mg/l Parameter: Xylene - Medium: whole blood - Sampling time: end of shift (all isomers) 2000 mg/l Parameter: Methylhippuric(tolur-)acid - Medium: urine - Sampling time: end of shift (all isomers)
Germany	TRGS 900 chemical category	Skin notation all isomers
Gibraltar	OEL TWA (mg/m³)	221 mg/m³ (pure)
Gibraltar	OEL TWA (ppm)	50 ppm (pure)
Gibraltar	OEL STEL (mg/m³)	442 mg/m³ (pure)
Gibraltar	OEL STEL (ppm)	100 ppm (pure)
Gibraltar	OEL chemical category (GI)	Skin notation
Greece	OEL TWA (mg/m³)	435 mg/m³
Greece	OEL TWA (ppm)	100 ppm
Greece	OEL STEL (mg/m³)	650 mg/m³
Greece	OEL STEL (ppm)	150 ppm
Greece	OEL chemical category (GR)	skin - potential for cutaneous absorption
USA ACGIH	ACGIH TWA (ppm)	100 ppm
USA ACGIH	ACGIH STEL (ppm)	150 ppm
Italy	OEL TWA (mg/m³)	221 mg/m³ (pure)
Italy	OEL TWA (ppm)	50 ppm (pure)
Italy	OEL STEL (mg/m³)	442 mg/m³ (pure)
Italy	OEL STEL (ppm)	100 ppm (pure)
Italy	OEL chemical category (IT)	skin - potential for cutaneous absorption pure
Latvia	OEL TWA (mg/m³)	221 mg/m³
Latvia	OEL TWA (ppm)	50 ppm
Latvia	OEL chemical category (LV)	skin - potential for cutaneous exposure
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 exposure
Spain	Spain - BEI	1 g/g Kreatinin Parameter: Methylhippuric acids - Medium: urine - Sampling time: end of shift
Switzerland	VLE (mg/m³)	870 mg/m³
Switzerland	VLE (ppm)	200 ppm
Switzerland	VME (mg/m³)	435 mg/m³
Switzerland	VME (ppm)	100 ppm
Switzerland	OEL chemical category (CH)	Skin notation

Xylenes (o-, m-, p- isomers) (1330-20-7)		
Switzerland	Switzerland - BEI	1,5 g/g Kreatinin Parameter: Methylhippuric acid - Medium: urine - Sampling time: end of shift, and after several shifts (for long-term exposures) 1,5 mg/l Parameter: Xylol - Medium: whole blood - Sampling time: end of shift
Netherlands	Grenswaarde TGG 8H (mg/m³)	210 mg/m³
Netherlands	Grenswaarde TGG 15MIN (mg/m³)	442 mg/m³
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
Czech Republic	Expoziční limity (PEL) (mg/m³)	200 mg/m³
Czech Republic	OEL chemical category (CZ)	Potential for cutaneous absorption
Czech Republic	Czech Republic - BEI	820 µmol/mmol Creatinine Parameter: Methylhippuric acid - Medium: urine - Sampling time: end of shift 1400 mg/g Kreatinin Parameter: Methylhippuric acid - Medium: urine - Sampling time: end of shift
Denmark	Grænseværdie (langvarig) (mg/m³)	109 mg/m³
Denmark	Grænseværdie (langvarig) (ppm)	25 ppm
Estonia	OEL TWA (mg/m³)	221 mg/m³
Estonia	OEL TWA (ppm)	50 ppm
Estonia	OEL STEL (mg/m³)	442 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 - BEI	Parameter: Methylhippuric acid - Medium: urine - Sampling time: end of shift
Hungary	AK-érték	221 mg/m³
Hungary	CK-érték	442 mg/m³
Hungary	OEL chemical category (HU)	Potential for cutaneous absorption
Ireland	OEL (8 hours ref) (mg/m³)	221 mg/m³
Ireland	OEL (8 hours ref) (ppm)	50 ppm
Ireland	OEL (15 min ref) (mg/m3)	442 mg/m³
Ireland	OEL (15 min ref) (ppm)	100 ppm

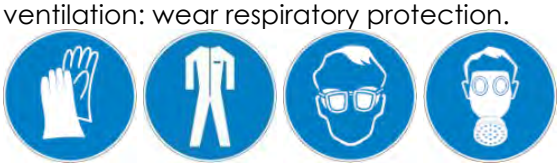
Xylenes (o-, m-, p- isomers) (1330-20-7)		
Ireland	OEL chemical category (IE)	Potential for cutaneous absorption
Lithuania	IPRV (mg/m³)	200 mg/m³
Lithuania	IPRV (ppm)	50 ppm
Lithuania	TPRV (mg/m³)	450 mg/m³
Lithuania	TPRV (ppm)	100 ppm
Lithuania	OEL chemical category (LT)	Skin notation
Luxembourg	OEL 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
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
Norway	Grenseverdier (AN) (mg/m³)	108 mg/m³
Norway	Grenseverdier (AN) (ppm)	25 ppm
Norway	Grenseverdier (Korttidsverdi) (mg/m3)	135 mg/m³
Norway	Grenseverdier (Korttidsverdi) (ppm)	37,5 ppm
Norway	OEL chemical category (NO)	Skin notation
Poland	NDS (mg/m³)	100 mg/m³
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 - BEI	3 g/l Parameter: Methylhippuric acid - Medium: urine - Sampling time: end of shift
Slovakia	NPHV (priemerná) (mg/m³)	221 mg/m³
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 - BEI	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 (SL)	Potential for cutaneous absorption
Sweden	nivågränsvärde (NVG) (mg/m³)	221 mg/m³
Sweden	nivågränsvärde (NVG) (ppm)	50 ppm

Xylenes (o-, m-, p- isomers) (1330-20-7)		
Sweden	kortidsvärde (KTV) (mg/m³)	442 mg/m³
Sweden	kortidsvärde (KTV) (ppm)	100 ppm
Sweden	OEL chemical category (SE)	Skin notation
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

Titanium dioxide (13463-67-7)		
Austria	MAK (mg/m³)	5 mg/m³ (alveolar dust, respirable fraction)
Austria	MAK Short time value (mg/m³)	10 mg/m³ (alveolar dust, respirable fraction)
Belgium	Limit value (mg/m³)	10 mg/m³
Bulgaria	OEL TWA (mg/m³)	10,0 mg/m³ (respirable dust)
Croatia	GVI (granična vrijednost izloženosti) (mg/m³)	10 mg/m³ (total dust) 4 mg/m³ (respirable dust)
France	VME (mg/m³)	10 mg/m³
Greece	OEL TWA (mg/m³)	10 mg/m³ (inhalable fraction) 5 mg/m³ (respirable fraction)
USA ACGIH	ACGIH TWA (mg/m³)	10 mg/m³
Latvia	OEL TWA (mg/m³)	10 mg/m³
Spain	VLA-ED (mg/m³)	10 mg/m³
Switzerland	VME (mg/m³)	3 mg/m³ (respirable dust)
United Kingdom	WEL TWA (mg/m³)	10 mg/m³ (total inhalable) 4 mg/m³ (respirable)
United Kingdom	WEL STEL (mg/m³)	30 mg/m³ (calculated-total inhalable) 12 mg/m³ (calculated-respirable)
Denmark	Grænseværdie (langvarig) (mg/m³)	6 mg/m³
Estonia	OEL TWA (mg/m³)	5 mg/m³
Ireland	OEL (8 hours ref) (mg/m³)	10 mg/m³ (total inhalable dust) 4 mg/m³ (respirable dust)
Ireland	OEL (15 min ref) (mg/m3)	30 mg/m³ (calculated-total inhalable dust) 12 mg/m³ (calculated-respirable dust)
Lithuania	IPRV (mg/m³)	5 mg/m³
Norway	Grenseverdier (AN) (mg/m³)	5 mg/m³
Norway	Grenseverdier (Korttidsverdi) (mg/m3)	5 mg/m³
Poland	NDS (mg/m³)	10,0 mg/m³ (<2% free crystalline silica and containing no asbestos-inhalable fraction)
Romania	OEL TWA (mg/m³)	10 mg/m³
Romania	OEL STEL (mg/m³)	15 mg/m³
Sweden	nivågränsvärde (NVG) (mg/m³)	5 mg/m³ (total dust)
Portugal	OEL TWA (mg/m³)	10 mg/m³
Portugal	OEL chemical category (PT)	A4 - Not Classifiable as a Human Carcinogen

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 vapours may be released. Proper grounding procedures to avoid static electricity should be followed. Use explosion-proof equipment.
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 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 properties

9.1. Information on basic physical and chemical properties

Physical state	: Liquid
Colour	: White.
Odour	: Solvent
Odour threshold	: No data available
pH	: No data available
Relative evaporation rate (butylacetate=1)	: No data available
Melting point	: No data available
Freezing point	: No data available
Boiling point	: 140 °C (284 °F)
Flash point	: 23 °C (73 °F)
Auto-ignition temperature	: No data available
Decomposition temperature	: No data available
Flammability (solid, gas)	: No data available
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	: Not applicable

9.2. Other information

No additional information available

SECTION 10: Stability and reactivity

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

10.2. Chemical stability
Extremely 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
No additional information available

SECTION 11: Toxicological information

11.1. Information on toxicological effects
Acute toxicity : Not classified

Xylenes (o-, m-, p- isomers) (1330-20-7)	
LD50 oral rat	> 5000 mg/kg
LD50 oral	3500 mg/kg
LC50 inhalation rat (ppm)	6247 ppm/4h (species: Sprague-Dawley)
ATE CLP (dermal)	1100,000 mg/kg bodyweight
ATE CLP (vapours)	11,000 mg/l/4h

Titanium dioxide (13463-67-7)	
LD50 oral rat	> 10000 mg/kg

Glycidoxypropyltrimethoxysilane (2530-83-8)	
LD50 oral rat	8025 mg/kg
LD50 dermal rabbit	4250 mg/kg
LC50 inhalation rat (Dust/Mist - mg/l/4h)	> 5,3 mg/l/4h

1-Butanol, titanium(4+) salt (5593-70-4)	
LD50 oral rat	> 2000 mg/kg
LD50 oral	3122 mg/kg

Siloxanes and Silicones, dimethyl, vinyl group-terminated (68083-19-2)	
LD50 oral rat	> 5000 mg/kg
LD50 dermal rabbit	> 20000 mg/kg
LC50 inhalation rat (mg/l)	> 600 mg/m³

Skin corrosion/irritation : Causes skin irritation.
Serious eye damage/irritation : Causes serious eye irritation.
Respiratory or skin sensitisation : Not classified
Germ cell mutagenicity : Not classified
Carcinogenicity : Not classified
Reproductive toxicity : Not classified
Specific target organ toxicity (single exposure) : Not classified
Specific target organ toxicity (repeated exposure) : Not classified
Aspiration hazard : May be fatal if swallowed and enters airways.

Potential adverse human health effects and symptoms : Based on available data, the classification criteria are not met.

SECTION 12: Ecological information

12.1. Toxicity

Ecology - general : Toxic to aquatic life.

Xylenes (o-, m-, p- isomers) (1330-20-7)	
LC50 fish 1	3,3 mg/l
EC50 Daphnia 1	3,82 mg/l (Exposure time: 48 h - Species: water flea)
LC50 fish 2	2,661 (2,661 - 4,093) mg/l (Exposure time: 96 h - Species: Oncorhynchus mykiss [static])

Titanium dioxide (13463-67-7)	
LC50 fish 1	> 1000 ml/l (Exposure Time: 96h - Species: Pimephales promelas (static)

Glycidoxypropyltrimethoxysilane (2530-83-8)	
LC50 fish 1	55 mg/l (Exposure time: 96 h - Species: Cyprinus carpio)
EC50 Daphnia 1	710 mg/l (Exposure time: 48 h - Species: Daphnia magna)
ErC50 (algae)	350 mg/l Exposure time: 96 h - Species: Pseudokirchnerella subcapitata)

1-Butanol, titanium(4+) salt (5593-70-4)	
EC50 Daphnia 1	680 mg/l

12.2. Persistence and degradability

MED-6613-1 Part A	
Persistence and degradability	Not established.

12.3. Bioaccumulative potential

MED-6613-1 Part A	
Bioaccumulative potential	Not established.

Xylenes (o-, m-, p- isomers) (1330-20-7)	
BCF fish 1	0,6 (0,6 - 15)
Log Pow	2,77 - 3,15

12.4. Mobility in soil

No additional information available

12.5. Results of PBT and vPvB assessment

No additional information available

12.6. Other adverse effects

Other information : Avoid release to the environment.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

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

Additional information : Handle empty containers with care because residual vapours are flammable.

Ecology - waste materials : Avoid release to the environment. This material is hazardous to the aquatic environment. Keep out of sewers and waterways.

SECTION 14: Transport information

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

14.1. UN number

UN-No. (ADR) : 1307

14.2. UN proper shipping name

Proper Shipping Name (ADR) : XYLENES

Transport document description (ADR) : UN 1307 XYLENES (SOLUTION), 3, III, (D/E)

14.3. Transport hazard class(es)

Class (ADR) : 3

Danger labels (ADR) : 3

14.4. Packing group

Packing group (ADR) : III

14.5. Environmental hazards

Other information : No supplementary information available.

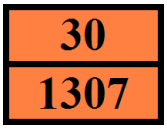
14.6. Special precautions for user

14.6.1. Overland transport

Hazard identification number (Kemler No.) : 30

Classification code (ADR) : F1

Orange plates :



Transport category (ADR) 3

Tunnel restriction code (ADR) : D/E

Limited quantities (ADR) 5l

Excepted quantities (ADR) : E1

EAC code : 3YE

14.6.2. Transport by sea

EmS-No. (1) : F-E

MFAG-No : 130

EmS-No. (2) : S-D

14.6.3. Air transport

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
1.3	Details of the supplier of the safety data sheet	Modified	28/09/2016
2	Hazards identification	Removed DSD/DPD information.	28/09/2016
3	Composition/information on ingredients	Removed not classified components and components below cutoffs. Removed DSD/DPD information.	28/09/2016
15.1.1	EU-Regulations	Modified	28/09/2016

Revision date : 28/09/2016

Data sources : 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
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. 2	Flammable liquids, Category 2
Flam. Liq. 3	Flammable liquids, Category 3
Skin Irrit. 2	Skin corrosion/irritation, Category 2
STOT SE 3	Specific target organ toxicity — Single exposure, Category 3, Narcosis
STOT SE 3	Specific target organ toxicity — Single exposure, Category 3, Respiratory tract irritation
H225	Highly flammable liquid and vapour
H226	Flammable liquid and vapour
H304	May be fatal if swallowed and enters airways
H312	Harmful in contact with skin
H315	Causes skin irritation
H318	Causes serious eye damage
H319	Causes serious eye irritation
H332	Harmful if inhaled
H335	May cause respiratory irritation
H336	May cause drowsiness or dizziness

Nusil EU GHS SDS

We believe that the information contained herein is current as of the date of this Safety Data Sheet, and is offered in good faith. Since the use of this information and of these opinions and the conditions of the use of the product are not within the control of NuSil Technology, it is the user's obligation to determine the conditions of safe use of the product.

MED-6613-1 Part B

Safety Data Sheet

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

Revision date:	Date of issue:	Version: 2.0
28/09/2016	01/10/2014	

SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1. Product identifier

Product form : Mixture

Product Name : MED-6613-1 Part B

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 LLC
1050 Cindy Lane
Carpinteria, California 93013
USA
(805) 684-8780
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)

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
Asp. Tox. 1 H304

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

Adverse physicochemical, human health and environmental effects

No additional information available

2.2. Label elements

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

Hazard pictograms (CLP) :

GHS02 GHS07 GHS08

Signal word (CLP) : Danger

Hazardous ingredients : Xylenes (o-, m-, p- isomers)

Hazard statements (CLP) : H226 - Flammable liquid and vapour
H304 - May be fatal if swallowed and enters airways
H315 - Causes skin irritation
H319 - Causes serious eye irritation

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/bond container and receiving equipment
P241 - Use explosion-proof electrical, lighting, ventilating equipment
P242 - Use only non-sparking tools
P243 - Take precautionary measures against static discharge
P264 - Wash hands, forearms and face thoroughly after handling
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/shower
P305+P351+P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing
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 appropriate media to extinguish
P403+P235 - Store in a well-ventilated place. Keep cool
P405 - Store locked up
P501 - Dispose of contents/container in accordance with local, regional, national, and international regulations

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. Substance

Not applicable

3.2. Mixture

Name	Product identifier	%	Classification according to Regulation (EC) No. 1272/2008 [CLP]
Xylenes (o-, m-, p- isomers)	(CAS No) 1330-20-7 (EC no) 215-535-7 (EC index no) 601-022-00-9	40 - 45	Flam. Liq. 3, H226 Acute Tox. 4 (Dermal), H312 Acute Tox. 4 (Inhalation:vapour), H332 Skin Irrit. 2, H315 Eye Irrit. 2, H319 Asp. Tox. 1, H304
Titanium dioxide	(CAS No) 13463-67-7 (EC no) 236-675-5	20 - 25	Not classified
Siloxanes and Silicones, dimethyl, vinyl group-terminated	(CAS No) 68083-19-2	20 - 25	Skin Irrit. 2, H315 Eye Irrit. 2, H319
Silicic acid (H4SiO4), tetraethyl ester, reaction products with chlorodimethylsilane	(CAS No) 68988-57-8 (EC no) 273-531-0	5 - 10	Flam. Liq. 3, H226 Skin Irrit. 2, H315 Eye Irrit. 2, H319

Name	Product identifier	%	Classification according to Regulation (EC) No. 1272/2008 [CLP]
3-Butyn-2-ol, 2-methyl-	(CAS No) 115-19-5 (EC no) 204-070-5	< 1	Flam. Liq. 2, H225 Acute Tox. 4 (Oral), H302 Eye Dam. 1, H318

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 : Remove contaminated clothing. Drench affected area with water for at least 15 minutes. Obtain medical attention if irritation develops or persists.

First-aid measures after eye contact : Rinse cautiously 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/injuries : Causes serious eye irritation. Causes skin irritation. May cause drowsiness and dizziness. May be fatal if swallowed and enters airways.

Symptoms/injuries after inhalation : High concentrations may cause central nervous system depression such as dizziness, vomiting, numbness, drowsiness, headache, and similar narcotic symptoms.

Symptoms/injuries after skin contact : Redness, pain, swelling, itching, burning, dryness, and dermatitis.

Symptoms/injuries after eye contact : Contact causes severe irritation with redness and swelling of the conjunctiva.

Symptoms/injuries after ingestion : Aspiration into the lungs can occur during ingestion or vomiting and may cause lung injury.

Chronic symptoms : None expected under normal conditions of use.

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.

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.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

General measures	: Avoid breathing (vapour, mist, spray). 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. Avoid all contact with skin, eyes, or clothing.

6.1.1. For non-emergency personnel

Protective equipment	: Use appropriate personal protection 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	: Ventilate area. Eliminate ignition sources. 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.

6.2. Environmental precautions

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

6.3. Methods and material 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.
Methods for cleaning up	: Clean up spills immediately and dispose of waste safely. 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	: Handle empty containers with care because residual vapours are flammable.
Precautions for safe handling	: Avoid breathing vapours, mist, spray. Take precautionary measures against static discharge. Use only non-sparking tools. Avoid contact with eyes, skin and clothing.
Hygiene measures	: Handle in accordance with good industrial hygiene and safety procedures. Wash hands and other exposed areas with mild soap and water before eating, drinking, or smoking and again when leaving work.

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 in a well-ventilated place. Keep container tightly closed. Keep in fireproof place.

Incompatible products : 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) (1330-20-7)		
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)
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 (all isomers)
Austria	MAK Short time value (ppm)	100 ppm (all isomers)
Austria	OEL chemical category (AT)	Skin notation
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)	221,0 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)
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

Xylenes (o-, m-, p- isomers) (1330-20-7)		
Croatia	Croatia - BEI	1,50 mg/l Parameter: Xylene - Medium: blood - Sampling time: at the end of the shift (Alcohol before exposure to Xylene raises occurrence) 1,50 g/g Kreatinin Parameter: Methylhippuric acid - Medium: blood - Sampling time: at the end of the shift (For all results that are expressed as Creatinine, Creatinine concentration <0.5 g/L and >3.0 g/L should not be considered)
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
France	VLE (mg/m³)	442 mg/m³ (restrictive limit)
France	VLE (ppm)	100 ppm (restrictive limit)
France	VME (mg/m³)	221 mg/m³ (restrictive limit)
France	VME (ppm)	50 ppm (restrictive limit)
France	OEL chemical category (FR)	Risk of cutaneous absorption
France	France - BEI	1500 mg/g Kreatinin Parameter: Methylhippuric acid - Medium: urine - Sampling time: end of shift
Germany	TRGS 900 Occupational exposure limit value (mg/m³)	440 mg/m³ (all isomers)
Germany	TRGS 900 Occupational exposure limit value (ppm)	100 ppm (all isomers)
Germany	TRGS 903 (BGW)	1,5 mg/l Parameter: Xylene - Medium: whole blood - Sampling time: end of shift (all isomers) 2000 mg/l Parameter: Methylhippuric(tolur-)acid - Medium: urine - Sampling time: end of shift (all isomers)
Germany	TRGS 900 chemical category	Skin notation all isomers
Gibraltar	OEL TWA (mg/m³)	221 mg/m³ (pure)
Gibraltar	OEL TWA (ppm)	50 ppm (pure)
Gibraltar	OEL STEL (mg/m³)	442 mg/m³ (pure)
Gibraltar	OEL STEL (ppm)	100 ppm (pure)
Gibraltar	OEL chemical category (GI)	Skin notation
Greece	OEL TWA (mg/m³)	435 mg/m³
Greece	OEL TWA (ppm)	100 ppm
Greece	OEL STEL (mg/m³)	650 mg/m³
Greece	OEL STEL (ppm)	150 ppm

Xylenes (o-, m-, p- isomers) (1330-20-7)		
Greece	OEL chemical category (GR)	skin - potential for cutaneous absorption
USA ACGIH	ACGIH TWA (ppm)	100 ppm
USA ACGIH	ACGIH STEL (ppm)	150 ppm
Italy	OEL TWA (mg/m³)	221 mg/m³ (pure)
Italy	OEL TWA (ppm)	50 ppm (pure)
Italy	OEL STEL (mg/m³)	442 mg/m³ (pure)
Italy	OEL STEL (ppm)	100 ppm (pure)
Italy	OEL chemical category (IT)	skin - potential for cutaneous absorption pure
Latvia	OEL TWA (mg/m³)	221 mg/m³
Latvia	OEL TWA (ppm)	50 ppm
Latvia	OEL chemical category (LV)	skin - potential for cutaneous exposure
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 exposure
Spain	Spain - BEI	1 g/g Kreatinin Parameter: Methylhippuric acids - Medium: urine - Sampling time: end of shift
Switzerland	VLE (mg/m³)	870 mg/m³
Switzerland	VLE (ppm)	200 ppm
Switzerland	VME (mg/m³)	435 mg/m³
Switzerland	VME (ppm)	100 ppm
Switzerland	OEL chemical category (CH)	Skin notation
Switzerland	Switzerland - BEI	1,5 g/g Kreatinin Parameter: Methylhippuric acid - Medium: urine - Sampling time: end of shift, and after several shifts (for long-term exposures) 1,5 mg/l Parameter: Xylol - Medium: whole blood - Sampling time: end of shift
Netherlands	Grenswaarde TGG 8H (mg/m³)	210 mg/m³
Netherlands	Grenswaarde TGG 15MIN (mg/m³)	442 mg/m³
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
Czech Republic	Expoziční limity (PEL) (mg/m³)	200 mg/m³

Xylenes (o-, m-, p- isomers) (1330-20-7)		
Czech Republic	OEL chemical category (CZ)	Potential for cutaneous absorption
Czech Republic	Czech Republic - BEI	820 µmol/mmol Creatinine Parameter: Methylhippuric acid - Medium: urine - Sampling time: end of shift 1400 mg/g Kreatinin Parameter: Methylhippuric acid - Medium: urine - Sampling time: end of shift
Denmark	Grænseværdie (langvarig) (mg/m³)	109 mg/m³
Denmark	Grænseværdie (langvarig) (ppm)	25 ppm
Estonia	OEL TWA (mg/m³)	221 mg/m³
Estonia	OEL TWA (ppm)	50 ppm
Estonia	OEL STEL (mg/m³)	442 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 - BEI	Parameter: Methylhippuric acid - Medium: urine - Sampling time: end of shift
Hungary	AK-érték	221 mg/m³
Hungary	CK-érték	442 mg/m³
Hungary	OEL chemical category (HU)	Potential for cutaneous absorption
Ireland	OEL (8 hours ref) (mg/m³)	221 mg/m³
Ireland	OEL (8 hours ref) (ppm)	50 ppm
Ireland	OEL (15 min ref) (mg/m3)	442 mg/m³
Ireland	OEL (15 min ref) (ppm)	100 ppm
Ireland	OEL chemical category (IE)	Potential for cutaneous absorption
Lithuania	IPRV (mg/m³)	200 mg/m³
Lithuania	IPRV (ppm)	50 ppm
Lithuania	TPRV (mg/m³)	450 mg/m³
Lithuania	TPRV (ppm)	100 ppm
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
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)

Xylenes (o-, m-, p- isomers) (1330-20-7)		
Malta	OEL chemical category (MT)	Possibility of significant uptake through the skin pure
Norway	Grenseverdier (AN) (mg/m³)	108 mg/m³
Norway	Grenseverdier (AN) (ppm)	25 ppm
Norway	Grenseverdier (Korttidsverdi) (mg/m3)	135 mg/m³
Norway	Grenseverdier (Korttidsverdi) (ppm)	37,5 ppm
Norway	OEL chemical category (NO)	Skin notation
Poland	NDS (mg/m³)	100 mg/m³
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 - BEI	3 g/l Parameter: Methylhippuric acid - Medium: urine - Sampling time: end of shift
Slovakia	NPHV (priemerná) (mg/m³)	221 mg/m³
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 - BEI	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 (SL)	Potential for cutaneous absorption
Sweden	nivågränsvärde (NVG) (mg/m³)	221 mg/m³
Sweden	nivågränsvärde (NVG) (ppm)	50 ppm
Sweden	kortidsvärde (KTV) (mg/m³)	442 mg/m³
Sweden	kortidsvärde (KTV) (ppm)	100 ppm
Sweden	OEL chemical category (SE)	Skin notation
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)

Xylenes (o-, m-, p- isomers) (1330-20-7)		
Portugal	OEL chemical category (PT)	A4 - Not Classifiable as a Human Carcinogen,skin - potential for cutaneous exposure indicative limit value

Titanium dioxide (13463-67-7)		
Austria	MAK (mg/m³)	5 mg/m³ (alveolar dust, respirable fraction)
Austria	MAK Short time value (mg/m³)	10 mg/m³ (alveolar dust, respirable fraction)
Belgium	Limit value (mg/m³)	10 mg/m³
Bulgaria	OEL TWA (mg/m³)	10,0 mg/m³ (respirable dust)
Croatia	GVI (granična vrijednost izloženosti) (mg/m³)	10 mg/m³ (total dust) 4 mg/m³ (respirable dust)
France	VME (mg/m³)	10 mg/m³
Greece	OEL TWA (mg/m³)	10 mg/m³ (inhalable fraction) 5 mg/m³ (respirable fraction)
USA ACGIH	ACGIH TWA (mg/m³)	10 mg/m³
Latvia	OEL TWA (mg/m³)	10 mg/m³
Spain	VLA-ED (mg/m³)	10 mg/m³
Switzerland	VME (mg/m³)	3 mg/m³ (respirable dust)
United Kingdom	WEL TWA (mg/m³)	10 mg/m³ (total inhalable) 4 mg/m³ (respirable)
United Kingdom	WEL STEL (mg/m³)	30 mg/m³ (calculated-total inhalable) 12 mg/m³ (calculated-respirable)
Denmark	Grænseværdie (langvarig) (mg/m³)	6 mg/m³
Estonia	OEL TWA (mg/m³)	5 mg/m³
Ireland	OEL (8 hours ref) (mg/m³)	10 mg/m³ (total inhalable dust) 4 mg/m³ (respirable dust)
Ireland	OEL (15 min ref) (mg/m3)	30 mg/m³ (calculated-total inhalable dust) 12 mg/m³ (calculated-respirable dust)
Lithuania	IPRV (mg/m³)	5 mg/m³
Norway	Grenseverdier (AN) (mg/m³)	5 mg/m³
Norway	Grenseverdier (Korttidsverdi) (mg/m3)	5 mg/m³
Poland	NDS (mg/m³)	10,0 mg/m³ (<2% free crystalline silica and containing no asbestos-inhalable fraction)
Romania	OEL TWA (mg/m³)	10 mg/m³
Romania	OEL STEL (mg/m³)	15 mg/m³
Sweden	nivågränsvärde (NVG) (mg/m³)	5 mg/m³ (total dust)
Portugal	OEL TWA (mg/m³)	10 mg/m³
Portugal	OEL chemical category (PT)	A4 - Not Classifiable as a Human Carcinogen

3-Butyn-2-ol, 2-methyl- (115-19-5)		
Austria	MAK (mg/m³)	3 mg/m³
Austria	MAK (ppm)	0,9 ppm
Austria	MAK Short time value (mg/m³)	6 mg/m³
Austria	MAK Short time value (ppm)	1,8 ppm
Germany	TRGS 900 Occupational exposure limit value (mg/m³)	3 mg/m³

3-Butyn-2-ol, 2-methyl- (115-19-5)		
Germany	TRGS 900 Occupational exposure limit value (ppm)	0,9 ppm

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 vapours may be released. Proper grounding procedures to avoid static electricity should be followed. Use explosion-proof equipment.

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 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 properties

9.1. Information on basic physical and chemical properties

Physical state	: Liquid
Colour	: White.
Odour	: Solvent.
Odour threshold	: No data available
pH	: No data available
Relative evaporation rate (butylacetate=1)	: 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)	: No data available
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	: Not applicable

9.2. Other information

No additional information available

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

Carbon oxides (CO, CO_2). Will decompose above 150 °C (>300° F) releasing formaldehyde vapours. Formaldehyde is a potential carcinogen and can act as a potential skin and respiratory sensitizer. Formaldehyde can also cause respiratory and eye irritation. May release flammable gases.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity : Not classified

Xylenes (o-, m-, p- isomers) (1330-20-7)	
LD50 oral rat	> 5000 mg/kg
LD50 oral	3500 mg/kg
LC50 inhalation rat (ppm)	6247 ppm/4h (species: Sprague-Dawley)
ATE CLP (dermal)	1100,000 mg/kg bodyweight
ATE CLP (vapours)	11,000 mg/l/4h

Titanium dioxide (13463-67-7)	
LD50 oral rat	> 10000 mg/kg

3-Butyn-2-ol, 2-methyl- (115-19-5)	
LD50 oral rat	1950 mg/kg
LD50 dermal rat	> 2000 mg/kg
LC50 inhalation rat (mg/l)	> 21300 mg/m³ (Exposure time: 4 h)
LC50 inhalation rat (Vapours - mg/l/4h)	> 21,3 mg/l/4h
ATE CLP (oral)	1950,000 mg/kg bodyweight
ATE CLP (vapours)	21,300 mg/l/4h
ATE CLP (dust,mist)	21,300 mg/l/4h

Siloxanes and Silicones, dimethyl, vinyl group-terminated (68083-19-2)	
LD50 oral rat	> 5000 mg/kg
LD50 dermal rabbit	> 20000 mg/kg
LC50 inhalation rat (mg/l)	> 600 mg/m³

Skin corrosion/irritation : Causes skin irritation.
Serious eye damage/irritation : Causes serious eye irritation.
Respiratory or skin sensitisation : Not classified
Germ cell mutagenicity : Not classified
Carcinogenicity : Not classified

Reproductive toxicity : Not classified
Specific target organ toxicity (single exposure) : Not classified
Specific target organ toxicity (repeated exposure) : Not classified
Aspiration hazard : May be fatal if swallowed and enters airways.
Potential adverse human health effects and symptoms : Harmful in contact with skin. Based on available data, the classification criteria are not met.

SECTION 12: Ecological information

12.1. Toxicity

Ecology - general : Toxic to aquatic life.

Xylenes (o-, m-, p- isomers) (1330-20-7)	
LC50 fish 1	3,3 mg/l
EC50 Daphnia 1	3,82 mg/l (Exposure time: 48 h - Species: water flea)
LC50 fish 2	2,661 (2,661 - 4,093) mg/l (Exposure time: 96 h - Species: Oncorhynchus mykiss [static])

Titanium dioxide (13463-67-7)	
LC50 fish 1	> 1000 ml/l (Exposure Time: 96h - Species: Pimephales promelas (static)

3-Butyn-2-ol, 2-methyl- (115-19-5)	
LC50 fish 1	3120 (3120 - 3480) mg/l (Exposure time: 96 h - Species: Pimephales promelas [flow-through])
EC50 Daphnia 1	500 mg/l (Exposure time: 48 h - Species: Daphnia magna)
EC50 other aquatic organisms 1	500 mg/l (Exposure time: 72 h - Species: Desmodesmus subspicatus)
LC50 fish 2	2200 (2200 - 4600) mg/l (Exposure time: 96 h - Species: Leuciscus idus [static])
EC50 other aquatic organisms 2	500 mg/l (Exposure time: 96 h - Species: Desmodesmus subspicatus)

12.2. Persistence and degradability

MED-6613-1 Part B	
Persistence and degradability	Not established.

12.3. Bioaccumulative potential

MED-6613-1 Part B	
Bioaccumulative potential	Not established.

Xylenes (o-, m-, p- isomers) (1330-20-7)	
BCF fish 1	0,6 (0,6 - 15)
Log Pow	2,77 - 3,15

3-Butyn-2-ol, 2-methyl- (115-19-5)	
Log Pow	0,318 (at 25 °C)

12.4. Mobility in soil

No additional information available

12.5. Results of PBT and vPvB assessment

No additional information available

12.6. Other adverse effects

Other information : Avoid release to the environment.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

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

Additional information : Handle empty containers with care because residual vapours are flammable.

Ecology - waste materials : Avoid release to the environment. This material is hazardous to the aquatic environment. Keep out of sewers and waterways.

SECTION 14: Transport information

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

14.1. UN number

UN-No. (ADR) : 1307

14.2. UN proper shipping name

Proper Shipping Name (ADR) : XYLENES

Transport document description (ADR) : UN 1307 XYLENES (SOLUTION), 3, III, (D/E)

14.3. Transport hazard class(es)

Class (ADR) : 3

Danger labels (ADR) : 3

14.4. Packing group

Packing group (ADR) : III

14.5. Environmental hazards

Other information : No supplementary information available.

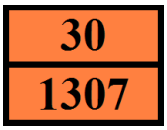
14.6. Special precautions for user

14.6.1. Overland transport

Hazard identification number (Kemler No.) : 30

Classification code (ADR) : F1

Orange plates :



Transport category (ADR) 3

Tunnel restriction code (ADR) : D/E

Limited quantities (ADR) 5l

Excepted quantities (ADR) : E1

EAC code : 3YE

14.6.2. Transport by sea

EmS-No. (1) : F-E

MFAG-No : 130

EmS-No. (2) : S-D

14.6.3. Air transport

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
1.3	Details of the supplier of the safety data sheet	Modified	28/09/2016
2	Hazards identification	Removed DSD/DPD information.	28/09/2016
3	Composition/information on ingredients	Removed not classified components and components below cutoffs. Removed DSD/DPD information.	28/09/2016
15.1.1	EU-Regulations	Modified	28/09/2016

Revision date : 28/09/2016
Data sources : 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
Acute Tox. 4 (Oral)	Acute toxicity (oral), Category 4
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. 2	Flammable liquids, Category 2
Flam. Liq. 3	Flammable liquids, Category 3
Skin Irrit. 2	Skin corrosion/irritation, Category 2
H225	Highly flammable liquid and vapour
H226	Flammable liquid and vapour
H302	Harmful if swallowed
H304	May be fatal if swallowed and enters airways
H312	Harmful in contact with skin
H315	Causes skin irritation
H318	Causes serious eye damage
H319	Causes serious eye irritation
H332	Harmful if inhaled

Nusil EU GHS SDS

We believe that the information contained herein is current as of the date of this Safety Data Sheet, and is offered in good faith. Since the use of this information and of these opinions and the conditions of the use of the product are not within the control of NuSil Technology, it is the user's obligation to determine the conditions of safe use of the product.

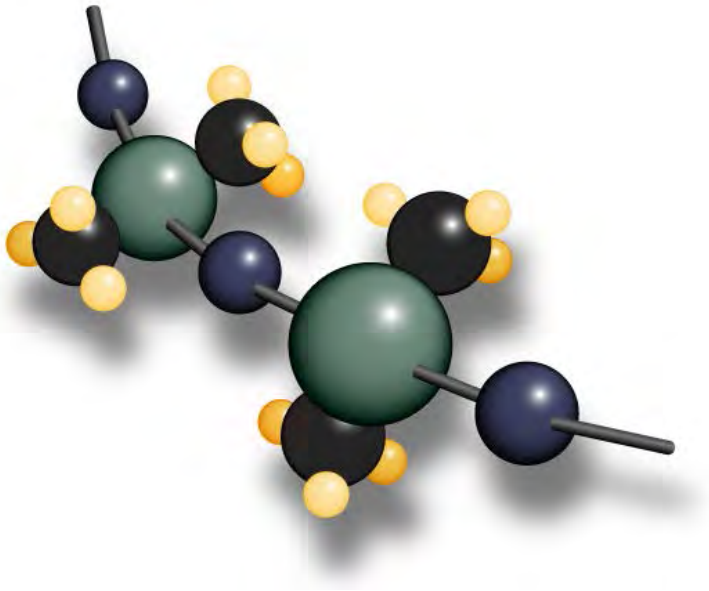
Silicone Sales & Services
UK - Ireland - Benelux

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



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