

SAFETY DATA SHEET **NITOFILL TH BASE**

SECTION 1: Identification o	SECTION 1: Identification of the substance/mixture and of the company/undertaking			
1.1. Product identifier				
Product name	NITOFILL TH BASE			
Product number	A1805001UK9			
1.2. Relevant identified uses	s of the substance or mixture and uses advised against			
Identified uses	Thixotropic epoxy resin crack injection system.			
1.3. Details of the supplier of	f the safety data sheet			
Supplier	Fosroc Limited Drayton Manor Business Park Coleshill Road Tamworth Staffordshire B78 3XN England Tel: +44 (0) 1827 262222 Fax: +44 (0) 1827 262444 enquiryuk@fosroc.com			
1.4. Emergency telephone r	number			
Emergency telephone	+44 (0) 1827 265 279 (Monday-Sunday 24 hours a day)			
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SECTION 2: Hazards identi				
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Hazard statements	H315 Causes skin irritation. H318 Causes serious eye damage. H317 May cause an allergic skin reaction. H411 Toxic to aquatic life with long lasting effects.
Precautionary statements	 P280 Wear protective gloves/ protective clothing/ eye protection/ face protection. P302+P352 IF ON SKIN: Wash with plenty of water. P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. P333+P313 If skin irritation or rash occurs: Get medical advice/ attention. P501 Dispose of contents/ container in accordance with national regulations.
Contains	reaction product: bisphenol-A-(epichlorhydrin) epoxy resin (number average molecular weight ≤ 700), Formaldehyde, oligomeric reaction products with 1-chloro-2,3-epoxypropane and phenol, 1.4 BUTANE DIGLYCIDYL ETHER
Supplementary precautionary statements	 P261 Avoid breathing vapour/ spray. P264 Wash contaminated skin thoroughly after handling. P272 Contaminated work clothing should not be allowed out of the workplace. P273 Avoid release to the environment. P310 Immediately call a POISON CENTER/ doctor. P321 Specific treatment (see medical advice on this label). P332+P313 If skin irritation occurs: Get medical advice/ attention. P362+P364 Take off contaminated clothing and wash it before reuse. P391 Collect spillage.

2.3. Other hazards

This product does not contain any substances classified as PBT or vPvB.

SECTION 3: Composition/information on ingredients

3.2. Mixtures		
reaction product: bisphenol-A-(epichlorhydrin) epoxy resin (number average molecular weight ≤ 700)		
CAS number: 25068-38-6	EC number: 500-033-5	REACH registration number: 01- 2119456619-26-XXXX
Classification		
Skin Irrit. 2 - H315		
Eye Irrit. 2 - H319		
Skin Sens. 1 - H317		
Aquatic Chronic 2 - H411		
Formaldehyde, oligomeric reaction products with 1-chloro- 2,3-epoxypropane and phenol		30-60%
CAS number: 9003-36-5	EC number: 500-006-8	
Classification		
Skin Irrit. 2 - H315		
Skin Sens. 1 - H317		
Aquatic Chronic 2 - H411		

1.4 BUTANE DIGLYCIDYL E	THER 10-30%
CAS number: 2425-79-8	EC number: 219-371-7
Classification Acute Tox. 4 - H302 Acute Tox. 4 - H332 Skin Irrit. 2 - H315 Eye Irrit. 2 - H319 Skin Sens. 1 - H317	
The Full Text for all R-Phrases	and Hazard Statements are Displayed in Section 16.
SECTION 4: First aid measure	35
4.1. Description of first aid mea	asures
Inhalation	Move affected person to fresh air at once. Place unconscious person on their side in the recovery position and ensure breathing can take place. Get medical attention if symptoms are severe or persist.
Ingestion	Rinse mouth thoroughly with water. Give plenty of water to drink.
Skin contact	Wash skin thoroughly with soap and water or use an approved skin cleanser. Get medical attention if irritation persists after washing.
Eye contact	Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Continue to rinse for at least 15 minutes. Get medical attention if irritation persists after washing.
4.2. Most important symptoms	and effects, both acute and delayed
General information	The severity of the symptoms described will vary dependent on the concentration and the length of exposure.
Inhalation	Irritating to respiratory system.
Ingestion	The product irritates mucous membranes and may cause abdominal discomfort if swallowed.
Skin contact	May cause sensitisation by skin contact. Irritating to skin.
Eye contact	Irritating to eyes.
4.3. Indication of any immediat	te medical attention and special treatment needed
Notes for the doctor	Treat symptomatically.
SECTION 5: Firefighting meas	sures
5.1. Extinguishing media	
Suitable extinguishing media	Extinguish with alcohol-resistant foam, carbon dioxide, dry powder or water fog.
Unsuitable extinguishing media	Do not use water jet as an extinguisher, as this will spread the fire.
5.2. Special hazards arising fro	om the substance or mixture
Hazardous combustion products	Carbon monoxide (CO).
5.3. Advice for firefighters	
Special protective equipment for firefighters	Wear positive-pressure self-contained breathing apparatus (SCBA) and appropriate protective clothing.

SECTION 6: Accidental release	e measures		
	tective equipment and emergency procedures		
Personal precautions	For personal protection, see Section 8.		
6.2. Environmental precaution	S		
Environmental precautions	Avoid discharge into drains or watercourses or onto the ground.		
6.3. Methods and material for	containment and cleaning up		
Methods for cleaning up	Collect spillage for reclamation or absorb in vermiculite, dry sand or similar material. Provide adequate ventilation.		
6.4. Reference to other section	ns		
Reference to other sections	For personal protection, see Section 8. For waste disposal, see Section 13.		
SECTION 7: Handling and sto	rage		
7.1. Precautions for safe hand	ling		
Usage precautions	Provide adequate ventilation. Avoid contact with skin and eyes. Avoid the formation of mists.		
7.2. Conditions for safe storag	e, including any incompatibilities		
Storage precautions	Store in tightly-closed, original container in a dry, cool and well-ventilated place.		
7.3. Specific end use(s)			
Specific end use(s)	The identified uses for this product are detailed in Section 1.2.		
SECTION 8: Exposure control	s/Personal protection		
8.1. Control parameters			
reaction produ	ct: bisphenol-A-(epichlorhydrin) epoxy resin (number average molecular weight ≤ 700) (CAS:		
	<u>25068-38-6)</u>		
DNEL	Workers - Inhalation; Short term systemic effects: 12.25 mg/m ³ Workers - Inhalation; Long term systemic effects: 12.25 mg/m ³		
PNEC	- Fresh water; 0.006 mg/l		
Formaldehyde, oligomeric reaction products with 1-chloro-2,3-epoxypropane and phenol (CAS: 9003-36-5)			
DNEL	Workers - Inhalation; Long term systemic effects: 29.39 mg/m³ Workers - Dermal; Long term systemic effects: 104.15 mg/kg/day Workers - Dermal; Short term local effects: 8.3 µg/cm2		
PNEC	- Fresh water; 0.003 mg/l - marine water; 0.0003 mg/l - STP; 10 mg/l		
	1.4 BUTANE DIGLYCIDYL ETHER (CAS: 2425-79-8)		
DNEL	Industry - Dermal; Long term systemic effects: 9.26 mg/kg/day Industry - Inhalation; Long term systemic effects: 1.63 mg/m³		

- STP; 100 mg/l
- Fresh water; 0.024 mg/l
- Sediment (Freshwater); 0.084 mg/kg
- marine water; 0.0024 mg/l
- Sediment (Marinewater); 0.0084 mg/kg
- Soil; 0.0027 mg/kg

8.2. Exposure controls

Protective equipment

Appropriate engineering controls	Provide adequate ventilation.
Eye/face protection	Wear chemical splash goggles. Wear tight-fitting, chemical splash goggles or face shield.
Hand protection	Wear protective gloves. It is recommended that gloves are made of the following material: Nitrile rubber. Butyl rubber.
Other skin and body protection	Wear apron or protective clothing in case of contact.
Hygiene measures	Wash at the end of each work shift and before eating, smoking and using the toilet.
Respiratory protection	Breathing apparatus in the event of aerosol or mist formation. Short term: filter apparatus, combination filter A-P2

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

9.1. Information on basic phys	ical and chemical properties
Appearance	Viscous liquid.
Colour	White.
Odour	Mild.
Odour threshold	Not determined.
рН	Not applicable.
Melting point	Not determined.
Initial boiling point and range	> 200°C @ 1 atm
Flash point	> 150°C Closed cup.
Evaporation rate	Not determined.
Evaporation factor	Not determined.
Flammability (solid, gas)	Not applicable.
Other flammability	Not determined.
Vapour pressure	0.1 kPa @ 20°C
Vapour density	Not determined.
Relative density	1.1 @ 20°C
Bulk density	Not applicable.

Solubility(ies)	Insoluble in water.
Partition coefficient	Not determined.
Decomposition Temperature	Not determined.
Explosive properties	Not determined.
Explosive under the influence of a flame	Not considered to be explosive.
Oxidising properties	Does not meet the criteria for classification as oxidising.
9.2. Other information	
Other information	No data available.
SECTION 10: Stability and rea	ctivity
10.1. Reactivity	
Reactivity	The reactivity data for this product will be typical of those for the following class of materials: Epoxides.
10.2. Chemical stability	
Stability	Stable at normal ambient temperatures and when used as recommended.
10.3. Possibility of hazardous	reactions
Possibility of hazardous reactions	Strong acids. Amines. Alkalis. Strong oxidising agents.
10.4. Conditions to avoid	
Conditions to avoid	No specific requirements are anticipated under normal conditions of use.
10.5. Incompatible materials	
Materials to avoid	No specific material or group of materials is likely to react with the product to produce a hazardous situation.
10.6. Hazardous decompositio	n products
Hazardous decomposition products	Irritant fumes.
SECTION 11: Toxicological inf	formation
11.1. Information on toxicologi	cal effects
Toxicological effects	This product has low toxicity.
Acute toxicity - dermal ATE dermal (mg/kg)	8,046.82
Acute toxicity - inhalation	
ATE inhalation (gases ppm)	32,918.8
ATE inhalation (vapours mg/l)	80.47
ATE inhalation (dusts/mists mg/l)	10.97
Skin contact	Irritating to skin. May cause sensitisation by skin contact.
Eye contact	Irritating to eyes.

SECTION 12: Ecological information			
Ecotoxicity	The product contains substances which are toxic to aquatic organisms and which may cause long-term adverse effects in the aquatic environment.		
12.1. Toxicity			
12.2. Persistence and degrada			
Persistence and degradability	Not expected to be readily biodegradable.		
12.3. Bioaccumulative potentia	<u>d</u>		
Partition coefficient	Not determined.		
12.4. Mobility in soil			
Mobility	The product has poor water-solubility.		
12.5. Results of PBT and vPvB	3 assessment		
Results of PBT and vPvB assessment	This product does not contain any substances classified as PBT or vPvB.		
12.6. Other adverse effects			
Other adverse effects	None known.		
SECTION 13: Disposal conside	erations		
13.1. Waste treatment method	<u>S</u>		
General information	Waste is classified as hazardous waste.		
Disposal methods	Dispose of waste to licensed waste disposal site in accordance with the requirements of the local Waste Disposal Authority.		
SECTION 14: Transport inform	nation		
14.1. UN number			
UN No. (ADR/RID)	3082		
UN No. (IMDG)	3082		
UN No. (ICAO)	3082		
UN No. (ADN)	3082		
14.2. UN proper shipping name	9		
Proper shipping name (ADR/RID)	- ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (EPOXY RESIN Type A, EPOXY RESIN Type F)		
Proper shipping name (IMDG)	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (EPOXY RESIN Type A, EPOXY RESIN Type F)		
Proper shipping name (ICAO)	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (EPOXY RESIN Type A, EPOXY RESIN Type F)		
Proper shipping name (ADN)	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (EPOXY RESIN Type A, EPOXY RESIN Type F)		
14.3. Transport hazard class(e	s)		
ADR/RID class	9		
ADR/RID classification code	M6		

ADR/RID label	9
IMDG class	9
ICAO class/division	9
ADN class	9

Transport labels

14.4.	Packing	group	

ADR/RID packing group	Ш
IMDG packing group	III
ICAO packing group	III
ADN packing group	III

14.5. Environmental hazards

Environmentally hazardous substance/marine pollutant



14.6. Special precautions for user

EmS	F-A, S-F
ADR transport category	3
Emergency Action Code	•3Z
Hazard Identification Number (ADR/RID)	90
Tunnel restriction code	(E)

14.7. Transport in bulk according to Annex II of MARPOL and the IBC Code

Transport in bulk according to Not applicable. Annex II of MARPOL 73/78 and the IBC Code

SECTION 15: Regulatory information

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

National regulations	Control of Substances Hazardous to Health Regulations 2002 (as amended).
EU legislation	Commission Regulation (EU) No 453/2010 of 20 May 2010. Regulation (EC) No 1272/2008 of the European Parliament and of the Council of 16 December 2008 on classification, labelling and packaging of substances and mixtures (as amended). Regulation (EC) No 1907/2006 of the European Parliament and of the Council of 18 December 2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH) (as amended).
Guidance	Workplace Exposure Limits EH40.

15.2. Chemical safety assessment

No chemical safety assessment has been carried out.

SECTION 16: Other information	
General information	Only trained personnel should use this material.
Training advice	Those who are employed in the use of this product must be given training which highlights the neeed to handle and use it only in the recommended manner and at all times make use of the prescribed personal protection equipment.
Revision comments	NOTE: Lines within the margin indicate significant changes from the previous revision.
Revision date	23/10/2019
Revision	3b
Supersedes date	25/05/2017
SDS number	12156
Hazard statements in full	 H302 Harmful if swallowed. 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. H411 Toxic to aquatic life with long lasting effects.

This information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process. Such information is, to the best of the company's knowledge and belief, accurate and reliable as of the date indicated. However, no warranty, guarantee or representation is made to its accuracy, reliability or completeness. It is the user's responsibility to satisfy himself as to the suitability of such information for his own particular use.



SAFETY DATA SHEET NITOFILL TH HARDENER

SECTION 1: Identification of	of the substance/mixture and of the company/undertaking
1.1. Product identifier	
Product name	NITOFILL TH HARDENER
Product number	A1805002UK9
1.2. Relevant identified use	s of the substance or mixture and uses advised against
Identified uses	Hardener component of two part epoxy system
1.3. Details of the supplier of	of the safety data sheet
Supplier	Fosroc Limited
	Drayton Manor Business Park
	Coleshill Road
	Tamworth
	Staffordshire
	B78 3XN
	England
	Tel: +44 (0) 1827 262222
	Fax: +44 (0) 1827 262444
	enquiryuk@fosroc.com
1.4. Emergency telephone	number
Emergency telephone	+44 (0) 1827 265 279 (Monday-Sunday 24 hours a day)
SECTION 2: Hazards ident	ification
2.1. Classification of the sul	bstance or mixture
Classification (EC 1272/200	<u>)8)</u>
Physical hazards	Not Classified
Health hazards	Acute Tox. 4 - H302 Skin Corr. 1B - H314 Eye Dam. 1 - H318 Skin Sens. 1 - H317
Environmental hazards	Aquatic Chronic 3 - H412
Human health	Prolonged or repeated contact with skin may cause redness, itching, irritation and eczema/chapping. The product contains a small amount of sensitising substance. May cause skin sensitisation or allergic reactions in sensitive individuals.
Environmental	The product contains a substance which is harmful to aquatic organisms and which may cause long-term adverse effects in the aquatic environment.
2.2. Label elements	
Hazard pictograms	
Circuit	Demos

Signal word

Danger

Hazard statements	H302 Harmful if swallowed. H314 Causes severe skin burns and eye damage. H317 May cause an allergic skin reaction. H412 Harmful to aquatic life with long lasting effects.
Precautionary statements	 P260 Do not breathe vapour/ spray. P303+P361+P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water or 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. P310 Immediately call a POISON CENTER/ doctor. P405 Store locked up. P501 Dispose of contents/ container in accordance with national regulations.
Contains	TRIMETHYL HEXAMETHYLENEDIAMINE, PARA TOLUENE SULPHONIC ACID MONO HYDRATE
Supplementary precautionary statements	 P261 Avoid breathing vapour/ spray. P264 Wash contaminated skin thoroughly after handling. P270 Do not eat, drink or smoke when using this product. P272 Contaminated work clothing should not be allowed out of the workplace. P273 Avoid release to the environment. P280 Wear protective gloves/ protective clothing/ eye protection/ face protection. P301+P312 IF SWALLOWED: Call a POISON CENTRE/doctor if you feel unwell. P301+P330+P331 IF SWALLOWED: Rinse mouth. Do NOT induce vomiting. P302+P352 IF ON SKIN: Wash with plenty of water. P304+P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing. P333+P313 If skin irritation or rash occurs: Get medical advice/ attention. P362+P364 Take off contaminated clothing and wash it before reuse. P363 Wash contaminated clothing before reuse.

2.3. Other hazards

This substance is not classified as PBT or vPvB according to current EU criteria.

SECTION 3: Composition/information on ingredients

3.2. Mixtures		
TRIMETHYL HEXAMETHYLENEDIAMINE		60-100%
CAS number: 25620-58-0	EC number: 247-134-8	
Classification		
Acute Tox. 4 - H302		
Skin Corr. 1B - H314		
Eye Dam. 1 - H318		
Skin Sens. 1 - H317		
Aquatic Chronic 3 - H412		

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NITOFILL TH HARDENER

PARA TOLUENE SULPHONIC ACID MONO HYDRATE 1-5%		
CAS number: 6192-52-5	EC number: 695-067-1	
Classification Met. Corr. 1 - H290 Skin Corr. 1B - H314 Eye Dam. 1 - H318 STOT SE 3 - H335		
The Full Text for all R-Phrases	s and Hazard Statements are Displayed in Section 16.	
SECTION 4: First aid measure	9S	
4.1. Description of first aid me	asures	
Inhalation	Remove affected person from source of contamination. Move affected person to fresh air and keep warm and at rest in a position comfortable for breathing. Get medical attention if any discomfort continues.	
Ingestion	Never give anything by mouth to an unconscious person. Do not induce vomiting. Rinse mouth thoroughly with water. Get medical attention immediately.	
Skin contact	Remove affected person from source of contamination. Remove contaminated clothing. Wash skin thoroughly with soap and water. Get medical attention promptly if symptoms occur after washing.	
Eye contact	Remove affected person from source of contamination. Rinse immediately with plenty of water. Remove contact lenses, if present and easy to do. Continue rinsing. Continue to rinse for at least 15 minutes. Get medical attention immediately.	
4.2. Most important symptoms	and effects, both acute and delayed	
General information	The severity of the symptoms described will vary dependent on the concentration and the length of exposure.	
Inhalation	Difficulty in breathing. Coughing, chest tightness, feeling of chest pressure. May cause an asthma-like shortness of breath. Severe irritation of nose and throat. Headache. Nausea, vomiting.	
Ingestion	May cause chemical burns in mouth and throat.	
Skin contact	May cause sensitisation by skin contact. May cause serious chemical burns to the skin.	
Eye contact	Eye contact may cause serious and potentially irreversible injuries.	
4.3. Indication of any immediate medical attention and special treatment needed		
Notes for the doctor	Treat symptomatically.	
SECTION 5: Firefighting measures		
5.1. Extinguishing media		
Suitable extinguishing media	Extinguish with alcohol-resistant foam, carbon dioxide, dry powder or water fog.	
Unsuitable extinguishing media	Do not use water jet as an extinguisher, as this will spread the fire.	
5.2. Special hazards arising fr	om the substance or mixture	
Hazardous combustion products	Thermal decomposition or combustion may liberate carbon oxides and other toxic gases or vapours. Oxides of nitrogen.	
5.3. Advice for firefighters		

Protective actions during firefighting	No specific firefighting precautions known.	
Special protective equipment for firefighters	Wear positive-pressure self-contained breathing apparatus (SCBA) and appropriate protective clothing.	
SECTION 6: Accidental releas	e measures	
6.1. Personal precautions, pro	tective equipment and emergency procedures	
Personal precautions	Wear protective clothing as described in Section 8 of this safety data sheet. Avoid contact with skin and eyes.	
6.2. Environmental precautions	<u>S</u>	
Environmental precautions	Avoid or minimise the creation of any environmental contamination.	
6.3. Methods and material for o	containment and cleaning up	
Methods for cleaning up	Do not touch or walk into spilled material. Stop leak if possible without risk. Absorb in vermiculite, dry sand or earth and place into containers. Flush contaminated area with plenty of water.	
6.4. Reference to other section		
Reference to other sections	For personal protection, see Section 8. For waste disposal, see section 13.	
SECTION 7: Handling and stor	rage	
7.1. Precautions for safe hand	ling	
Usage precautions	Provide adequate ventilation. Avoid inhalation of vapours/spray and contact with skin and eyes.	
7.2. Conditions for safe storage	e, including any incompatibilities	
Storage precautions	Store in tightly-closed, original container in a dry, cool and well-ventilated place. Keep only in the original container.	
Storage class	Corrosive storage.	
7.3. Specific end use(s)		
Specific end use(s)	The identified uses for this product are detailed in Section 1.2.	
SECTION 8: Exposure controls	s/Personal protection	
8.1. Control parameters		
Ingredient comments	No exposure limits known for ingredient(s).	
8.2. Exposure controls		
Protective equipment		
Appropriate engineering controls	Provide adequate ventilation.	
Eye/face protection	Eyewear complying with an approved standard should be worn if a risk assessment indicates eye contact is possible. The following protection should be worn: Chemical splash goggles or face shield.	

Hand protection	Chemical-resistant, impervious gloves complying with an approved standard should be worn if a risk assessment indicates skin contact is possible. Polyvinyl chloride (PVC). Nitrile rubber. Viton rubber (fluoro rubber).
Other skin and body protection	Wear appropriate clothing to prevent any possibility of skin contact. Use barrier creams to minimise skin contact.
Hygiene measures	Provide eyewash station and safety shower. Do not smoke in work area. Wash at the end of each work shift and before eating, smoking and using the toilet. Promptly remove any clothing that becomes contaminated. Wash promptly with soap and water if skin becomes contaminated. Use appropriate skin cream to prevent drying of skin. When using do not eat, drink or smoke.
Respiratory protection	Respiratory protection may be required if excessive airborne contamination occurs. It is recommended to use respiratory equipment with combination filter, type A2/P2.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Appearance	Liquid.
Colour	Colourless.
Odour	Amine.
Odour threshold	Not determined.
рН	pH (concentrated solution): 11
Melting point	Not determined.
Initial boiling point and range	>230°C @ 1 atm
Flash point	110°C
Evaporation rate	Not determined.
Flammability (solid, gas)	Not applicable.
Upper/lower flammability or explosive limits	Lower flammable/explosive limit: 1.2 vol %
Other flammability	Not determined.
Vapour pressure	0.002 kPa @ 20°C
Vapour density	Not determined.
Relative density	0.88 - 0.90 @ 20°C
Bulk density	Not applicable.
Solubility(ies)	Miscible with water.
Partition coefficient	Not determined.
Auto-ignition temperature	350°C
Decomposition Temperature	Not determined.
Explosive properties	Not considered to be explosive.
Explosive under the influence of a flame	Not considered to be explosive.
Oxidising properties	Does not meet the criteria for classification as oxidising.

9.2. Other information

9.2. Other information		
Other information	Not available.	
SECTION 10: Stability and rea	activity	
10.1. Reactivity		
Reactivity	The following materials may react with the product: Acids.	
10.2. Chemical stability		
Stability	Stable at normal ambient temperatures.	
10.3. Possibility of hazardous	reactions	
Possibility of hazardous reactions	Reacts with Acids, Alkalis and Oxidising Agents	
10.4. Conditions to avoid		
Conditions to avoid	Avoid excessive heat for prolonged periods of time.	
10.5. Incompatible materials		
Materials to avoid	Strong oxidising agents. Strong acids.	
10.6. Hazardous decompositio	on products	
Hazardous decomposition products	Thermal decomposition or combustion may liberate carbon oxides and other toxic gases or vapours. Oxides of nitrogen.	
SECTION 11: Toxicological in	formation	
11.1. Information on toxicolog	ical effects	
Acute toxicity - oral		
ATE oral (mg/kg)	517.22	
Inhalation	Harmful by inhalation. May cause damage to mucous membranes in nose, throat, lungs and bronchial system.	
Ingestion	Harmful if swallowed. May cause burns in mucous membranes, throat, oesophagus and stomach.	
Skin contact	Causes burns. Harmful in contact with skin. May cause sensitisation by skin contact.	
Eye contact	Causes burns. Risk of serious damage to eyes.	
Acute and chronic health hazards	This product is corrosive.	
Route of exposure	Inhalation Ingestion. Skin and/or eye contact	
Target organs	No specific target organs known.	
Toxicological information on ingredients.		

TRIMETHYL HEXAMETHYLENEDIAMINE

Acute toxicity - oral		
Acute toxicity oral (LD₅₀ mg/kg)	910.0	
Species	Rat	
Skin sensitisation		

	Skin sensitisatior	Sensitising.	
SECTION 1	2: Ecological inform	ation	
Ecotoxicity		The product contains a substance which is harmful to aquatic organisms and which may cause long-term adverse effects in the aquatic environment.	
<u>12.1. Toxici</u>	ty		
		Ecotoxic to fish/daphnia/algae	
Ecological in	nformation on ingre		
	A		
	Acute aquatic tox		
	Acute toxicity - fis		
	Acute toxicity - ad invertebrates	Jatic EC₅₀, 24 hours: 31.5 mg/l, Daphnia magna	
	Acute toxicity - ad plants	uatic EC ₅₀ , 72 hours: 29.5 mg/l, Scenedesmus subspicatus	
	Acute toxicity - microorganisms	EC10, 16 hours: 72 mg/l, Pseudomonas putida	
12.2. Persis	tence and degrada	bility	
Persistence	and degradability	The product is not readily biodegradable.	
12.3. Bioac	cumulative potentia		
Bioaccumul	ative potential	No data available on bioaccumulation.	
Partition co	efficient	Not determined.	
12.4. Mobili	ty in soil		
Mobility		The product is miscible with water and may spread in water systems.	
12.5. Result	ts of PBT and vPvI	assessment	
Results of F assessment	PBT and vPvB t	This product does not contain any substances classified as PBT or vPvB.	
12.6. Other	adverse effects		
Other adver	rse effects	Not relevant.	
SECTION 13: Disposal considerations			
13.1. Waste	e treatment method		
General info	ormation	When handling waste, the safety precautions applying to handling of the product should be considered.	
Disposal me	ethods	Dispose of waste to licensed waste disposal site in accordance with the requirements of the local Waste Disposal Authority. Note that fully cured material is not considered as hazardous waste.	
SECTION 14: Transport information			
14.1. UN nu	ımber		
UN No. (AD	R/RID)	2327	

UN No. (IMDG)	2327	
UN No. (ICAO)	2327	
UN No. (ADN)	2327	
14.2. UN proper shipping name	e	
Proper shipping name (ADR/RID)	TRIMETHYLHEXAMETHYLENEDIAMINES	
Proper shipping name (IMDG)	TRIMETHYLHEXAMETHYLENEDIAMINES	
Proper shipping name (ICAO)	TRIMETHYLHEXAMETHYLENEDIAMINES	
Proper shipping name (ADN)	TRIMETHYLHEXAMETHYLENEDIAMINES	
14.3. Transport hazard class(e	<u>es)</u>	
ADR/RID class	8	
ADR/RID classification code	C7	
ADR/RID label	8	
IMDG class	8	
ICAO class/division	8	
ADN class	8	
Transport labels		
B		
14.4. Packing group		
ADR/RID packing group	III	
IMDG packing group	III	
ICAO packing group	III	
ADN packing group	III	
14.5. Environmental hazards		
Environmentally hazardous substance/marine pollutant		
14.6. Special precautions for u	ser	
EmS	F-A, S-B	
ADR transport category	3	
Emergency Action Code	2X	
Hazard Identification Number (ADR/RID)	80	
Tunnel restriction code	(E)	
14.7. Transport in bulk according to Annex II of MARPOL and the IBC Code		

SECTION 15: Regulatory information

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

National regulations	Control of Substances Hazardous to Health Regulations 2002 (as amended).
EU legislation	 Regulation (EC) No 1272/2008 of the European Parliament and of the Council of 16 December 2008 on classification, labelling and packaging of substances and mixtures (as amended). Regulation (EC) No 1907/2006 of the European Parliament and of the Council of 18 December 2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH) (as amended). Commission Regulation (EU) No 2015/830 of 28 May 2015.
Guidance	Workplace Exposure Limits EH40. Approved Classification and Labelling Guide (Sixth edition) L131.

15.2. Chemical safety assessment

No chemical safety assessment has been carried out.

SECTION 16: Other information

Abbreviations and acronyms used in the safety data sheet	ATE: Acute Toxicity Estimate. DNEL: Derived No Effect Level. PNEC: Predicted No Effect Concentration. Kow: Octanol-water partition coefficient.
General information	For professional users only. The user must be instructed in the proper work procedure and be familiar with the contents of these instructions.
Revision comments	NOTE: Lines within the margin indicate significant changes from the previous revision.
Revision date	23/10/2019
Revision	3d
Supersedes date	25/05/2017
SDS number	12157
Hazard statements in full	 H290 May be corrosive to metals. H302 Harmful if swallowed. H314 Causes severe skin burns and eye damage. H317 May cause an allergic skin reaction. H318 Causes serious eye damage. H335 May cause respiratory irritation. H412 Harmful to aquatic life with long lasting effects.

This information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process. Such information is, to the best of the company's knowledge and belief, accurate and reliable as of the date indicated. However, no warranty, guarantee or representation is made to its accuracy, reliability or completeness. It is the user's responsibility to satisfy himself as to the suitability of such information for his own particular use.