SAFETY DATA SHEET

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

1.1. Product identifier

Trade name or designation of the mixture	Hylomar ST574 Part A Hardener
Registration number	-
Synonyms	None.
SDS number	24
Issue date	10-October-2012
Version number	01
Revision date	-
Supersedes date	-

1.2. Relevant identified uses of the substance or mixture and uses advised against

Identified uses	Cable Gland Putty
Uses advised against	None known.

1.3. Details of the supplier of the safety data sheet

Manufacturer:	Hylomar Ltd.
Address:	Hylo House, Cale Lane, New Springs, Wigan, Greater Manchester, UK, WN2 1JT
Telephone number:	+44(0)1942 617000
E-mail address:	info@hylomar.co.uk
Contact person:	Technical Department
1.4. Emergency telephone number	1-760-476-3961 Access code: 333544

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

The mixture has been assessed and/or tested for its physical, health and environmental hazards and the following classification applies.

Classification according to Directive 67/548/EEC or 1999/45/EC as amended

Classification	Xn;R48/20, R43, R52/53

The full text for all R-phrases is displayed in section 16.

Classification according to Regulation (EC) No 1272/2008 as amended

Health hazards		
Skin sensitisation	Category 1	H317 - May cause an allergic skin reaction.
Specific target organ toxicity - repeated exposure	Category 1	H372 - Causes damage to organs (Lungs) through prolonged or repeated exposure.
Environmental hazards		
Hazardous to the aquatic environment, long-term aquatic hazard	Category 3	H412 - Harmful to aquatic life with long lasting effects.

Hazard summary

Physical hazards	Not classified for physical hazards.
Health hazards	May cause sensitisation by skin contact. Harmful: danger of serious damage to health by prolonged exposure through inhalation.
Environmental hazards	Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
Specific hazards	May cause sensitisation by skin contact. Repeated exposure to high concentrations of dust may adversely affect the lungs and increase the risks of developing respiratory cancer.
Main symptoms	Sensitisation. Dust may irritate respiratory system. May cause eye irritation. May cause skin irritation.

2.2. Label elements

Label according to Regulation (EC) No. 1272/2008 as amended

Contains: Quartz, Triethylenetetramine

Hazard pictograms

Signal word Danger

Hazard statements H372 - Causes damage to organs (Lungs) through prolonged or repeated exposure.
H317 - May cause an allergic skin reaction.
H412 - Harmful to aquatic life with long lasting effects.

Precautionary statements

Prevention P280 - Wear protective gloves/protective clothing/eye protection/face protection.
P260 - Do not breathe dust/fume/gas/mist/vapors/spray.

Response P302 + P352 - IF ON SKIN: Wash with plenty of soap and water.
P333 + P313 - If skin irritation or rash occurs: Get medical advice/attention.
P314 - Get medical advice/attention if you feel unwell.

Storage None.

Disposal P501 - Dispose of contents/container in accordance with local/regional/national/international regulations.

Supplemental label information Not applicable.

2.3. Other hazards Not a PBT or vPvB substance or mixture.

SECTION 3: Composition/information on ingredients

3.2. Mixtures

General information

Chemical name	%	CAS-No. / EC No.	REACH Registration No.	INDEX No.	Notes
Quartz	60 - < 70	14808-60-7 238-878-4	-	-	
Classification:	**DSD:** Xn;R48/20				
	CLP: STOT RE 1;H372				
4-Tert-butylphenol	5 - < 10	98-54-4 202-679-0	-	-	
Classification:	**DSD:** -				
	CLP: Aquatic Chronic 2;H411				
Calcium carbonate	5 - < 10	1317-65-3 215-279-6	-	-	
Classification:	**DSD:** Xi;R36/38				
	CLP: Skin Irrit. 2;H315, Eye Irrit. 2;H319				
2,4,6-Tris-(dimethylaminomethyl)-phenol	1 - < 3	90-72-2 202-013-9	-	603-069-00-0	
Classification:	**DSD:** Xn;R22, Xi;R36/38				
	CLP: Acute Tox. 4;H302, Acute Tox. 4;H312, Skin Irrit. 2;H315, Eye Irrit. 2;H319				
Triethylenetetramine	1 - < 3	112-24-3 203-950-6	-	612-059-00-5	
Classification:	**DSD:** C;R34, Xn;R21, R43, R52/53				
	CLP: Acute Tox. 4;H302, Acute Tox. 4;H312, Skin Corr. 1B;H314, Skin Sens. 1;H317, Aquatic Chronic 3;H412				

DSD: Directive 67/548/EEC.
CLP: Regulation No. 1272/2008.

#: This substance has been assigned Community workplace exposure limit(s).

Composition comments The full text for all R- and H-phrases is displayed in section 16. All concentrations are in percent by weight unless ingredient is a gas. Gas concentrations are in percent by volume.

SECTION 4: First aid measures

General information Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves.

4.1. Description of first aid measures

Inhalation Move injured person into fresh air and keep person calm under observation. Get medical attention if discomfort persists.

Skin contact Immediately flush with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. In case of allergic reaction or other skin disorders: Seek medical attention and bring along these instructions.

Eye contact Immediately flush with plenty of water for at least 15 minutes occasionally lifting upper and lower eyelids. If easy to do, remove contact lenses. Get medical attention.

Ingestion Rinse mouth thoroughly with water and give large amounts of milk or water to people not unconscious. Get medical attention if irritation develops and persists. Symptoms may be delayed.

4.2. Most important symptoms and effects, both acute and delayed Sensitisation. Dust may irritate respiratory system. May cause eye irritation. May cause skin irritation.

4.3. Indication of any immediate medical attention and special treatment needed Treat symptomatically. Symptoms may be delayed.

SECTION 5: Firefighting measures

General fire hazards No unusual fire or explosion hazards noted.

5.1. Extinguishing media

Suitable extinguishing media Water. Water fog. Foam. Dry chemical powder. Carbon dioxide (CO_2).

Unsuitable extinguishing media Do not use water jet as an extinguisher, as this will spread the fire.

5.2. Special hazards arising from the substance or mixture During fire, traces of gases hazardous to health may be formed.

5.3. Advice for firefighters

Special protective equipment for firefighters Self-contained breathing apparatus and full protective clothing must be worn in case of fire. Selection of respiratory protection for firefighting: follow the general fire precautions indicated in the workplace.

Special fire fighting procedures Move containers from fire area if you can do so without risk.
Use standard firefighting procedures and consider the hazards of other involved materials.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

For non-emergency personnel Ensure adequate ventilation. Wear appropriate personal protective equipment (See Section 8).

For emergency responders Keep unnecessary personnel away.

6.2. Environmental precautions Environmental manager should be informed of all releases, as necessary. Reporting of releases to appropriate regulatory agencies may be required. Prevent entry into waterways, sewer, basements or confined areas.

6.3. Methods and material for containment and cleaning up Absorb spillage with suitable absorbent material. Collect spillage in containers, seal securely and deliver for disposal according to local regulations. Flush area with water. Prevent runoff from entering drains, sewers, or streams.

6.4. Reference to other sections For personal protection, see section 8. For waste disposal, see section 13.

SECTION 7: Handling and storage

7.1. Precautions for safe handling Avoid contact with eyes, skin, and clothing. Wear appropriate personal protective equipment (See Section 8). Use only with adequate ventilation. Wash thoroughly after handling.

7.2. Conditions for safe storage, including any incompatibilities Keep container tightly closed and in a well-ventilated place. Store in a cool, dry place. Store away from incompatible materials (See Section 10).

7.3. Specific end use(s) Cable Gland Putty

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Occupational exposure limits

Austria. MAK List

Components	Type	Value	Form
4-Tert-butylphenol (CAS 98-54-4)	MAK	0,5 mg/m3	
		0,08 ppm	
	STEL	2,5 mg/m3	
		0,4 ppm	
Iron oxide (Fe2O3) (CAS 1309-37-1)	MAK	5 mg/m3	Respirable fraction.
		10 mg/m3	Inhalable fraction.
	STEL	20 mg/m3	Inhalable fraction.
		10 mg/m3	Respirable fraction.
Quartz (CAS 14808-60-7)	MAK	0,15 mg/m3	Respirable dust.

Belgium. Exposure Limit Values.

Components	Type	Value	Form
Calcium carbonate (CAS 1317-65-3)	TWA	10 mg/m3	
Iron oxide (Fe2O3) (CAS 1309-37-1)	TWA	5 mg/m3	Fume.
		2 ppm	Fume.
Quartz (CAS 14808-60-7)	TWA	0,1 mg/m3	Respirable dust.

Bulgaria. OELs. Regulation No 13 on protection of workers against risks of exposure to chemical agents at work

Components	Type	Value	Form
Calcium carbonate (CAS 1317-65-3)	TWA	1 fibers/cm3	Respirable fraction.
		10 mg/m3	Inhalable fraction.
		10 mg/m3	
Iron oxide (Fe2O3) (CAS 1309-37-1)	TWA	6 mg/m3	Inhalable fraction.
		5 mg/m3	
Quartz (CAS 14808-60-7)	TWA	0,07 mg/m3	Respirable fraction.

Czech Republic. OELs. Government Decree 361

Components	Type	Value	Form
Calcium carbonate (CAS 1317-65-3)	TWA	10 mg/m3	Dust.
Quartz (CAS 14808-60-7)	TWA	0,1 mg/m3	Respirable dust.

Denmark. Exposure Limit Values

Components	Type	Value	Form
4-Tert-butylphenol (CAS 98-54-4)	TLV	0,5 mg/m3	
		0,08 ppm	
Iron oxide (Fe2O3) (CAS 1309-37-1)	TLV	3,5 mg/m3	
Quartz (CAS 14808-60-7)	TLV	0,3 mg/m3	Total
		0,1 mg/m3	Respirable.

Estonia. OELs. Occupational Exposure Limits of Hazardous Substances. (Annex of Regulation No. 293 of 18 September 2001)

Components	Type	Value	Form
Calcium carbonate (CAS 1317-65-3)	TWA	5 mg/m3	Respirable dust.
		10 mg/m3	
Iron oxide (Fe2O3) (CAS 1309-37-1)	TWA	3,5 mg/m3	Respirable dust.
Quartz (CAS 14808-60-7)	TWA	0,1 mg/m3	Respirable dust.
Triethylenetetramine (CAS 112-24-3)	STEL	12 mg/m3	
	TWA	6 mg/m3	
		1 ppm	

Finland. Workplace Exposure Limits

Components	Type	Value	Form
Iron oxide (Fe2O3) (CAS 1309-37-1)	TWA	5 mg/m3	Mist.
Quartz (CAS 14808-60-7)	TWA	0,2 mg/m3	Respirable.

France. Threshold Limit Values (VLEP) for Occupational Exposure to Chemicals in France, INRS ED 984

Components	Type	Value	Form
Calcium carbonate (CAS 1317-65-3)	VME	10 mg/m3	
Iron oxide (Fe2O3) (CAS 1309-37-1)	VME	5 mg/m3	Fume.
Quartz (CAS 14808-60-7)	VME	0,1 mg/m3	Respirable fraction.

Germany. DFG MAK List (advisory OELs). Commission for the Investigation of Health Hazards of Chemical Compounds in the Work Area (DFG)

Components	Type	Value
4-Tert-butylphenol (CAS 98-54-4)	TWA	0,5 mg/m3
		0,08 ppm

Germany. TRGS 900, Limit Values in the Ambient Air at the Workplace

Components	Type	Value	Form
4-Tert-butylphenol (CAS 98-54-4)	AGW	0,5 mg/m3	
		0,08 ppm	
Iron oxide (Fe2O3) (CAS 1309-37-1)	AGW	3 mg/m3	Respirable fraction.
		10 mg/m3	Inhalable fraction.

Greece. OELs (Decree No. 90/1999, as amended)

Components	Type	Value	Form
Calcium carbonate (CAS 1317-65-3)	TWA	5 mg/m3	Respirable.
		10 mg/m3	Inhalable
Iron oxide (Fe2O3) (CAS 1309-37-1)	STEL	10 mg/m3	
	TWA	10 mg/m3	

Hungary. OELs. Joint Decree on Chemical Safety of Workplaces

Components	Type	Value	Form
Calcium carbonate (CAS 1317-65-3)	TWA	10 mg/m3	
Iron oxide (Fe2O3) (CAS 1309-37-1)	TWA	6 mg/m3	Respirable.
Quartz (CAS 14808-60-7)	TWA	0,15 mg/m3	Respirable.

Iceland. OELs. Regulation 154/1999 on occupational exposure limits

Components	Type	Value	Form
4-Tert-butylphenol (CAS 98-54-4)	TWA	0,5 mg/m3	
		0,08 ppm	
Iron oxide (Fe2O3) (CAS 1309-37-1)	TWA	3,5 mg/m3	Respirable dust.
Quartz (CAS 14808-60-7)	TWA	0,3 mg/m3	Total dust.
		0,1 mg/m3	Respirable dust.
Triethylenetetramine (CAS 112-24-3)	TWA	6 mg/m3	
		1 ppm	

Ireland. Occupational Exposure Limits

Components	Type	Value	Form
Calcium carbonate (CAS 1317-65-3)	TWA	4 mg/m3	Respirable dust.
		10 mg/m3	Total inhalable dust.

Ireland. Occupational Exposure Limits

Components	Type	Value	Form
Iron oxide (Fe2O3) (CAS 1309-37-1)	STEL	10 mg/m3	Fume.
	TWA	5 mg/m3	Fume.
		4 mg/m3	Respirable dust.
		10 mg/m3	Total inhalable dust.
Quartz (CAS 14808-60-7)	TWA	0,1 mg/m3	Respirable dust.

Italy. OELs

Components	Type	Value	Form
Iron oxide (Fe2O3) (CAS 1309-37-1)	TWA	5 mg/m3	Respirable fraction.
Quartz (CAS 14808-60-7)	TWA	0,025 mg/m3	Respirable fraction.

Lithuania. OELs. Limit Values for Chemical Substances, General Requirements (Hygiene Norm HN 23:2007)

Components	Type	Value	Form
Iron oxide (Fe2O3) (CAS 1309-37-1)	TWA	3,5 mg/m3	Respirable fraction.
Quartz (CAS 14808-60-7)	TWA	0,1 mg/m3	Respirable fraction.
Triethylenetetramine (CAS 112-24-3)	STEL	12 mg/m3	
		2 ppm	
	TWA	6 mg/m3	
		1 ppm	

Netherlands. OELs (binding)

Components	Type	Value	Form
Quartz (CAS 14808-60-7)	TWA	0,075 mg/m3	Respirable dust.

Norway. Administrative Norms for Contaminants in the Workplace

Components	Type	Value	Form
Iron oxide (Fe2O3) (CAS 1309-37-1)	TLV	3 mg/m3	
Quartz (CAS 14808-60-7)	TLV	0,3 mg/m3	Total dust.
		0,1 mg/m3	Respirable dust.
Triethylenetetramine (CAS 112-24-3)	TLV	6 mg/m3	
		1 ppm	

Poland. MACs. Minister of Labour and Social Policy Regarding Maximum Allowable Concentrations and Intensities in Working Environment

Components	Type	Value	Form
Iron oxide (Fe2O3) (CAS 1309-37-1)	STEL	10 mg/m3	Fume.
	TWA	5 mg/m3	Fume.
Quartz (CAS 14808-60-7)	TWA	2 mg/m3	Total dust.
		0,3 mg/m3	Respirable dust.
Triethylenetetramine (CAS 112-24-3)	STEL	3 mg/m3	
	TWA	1 mg/m3	

Portugal. VLEs. Norm on occupational exposure to chemical agents (NP 1796)

Components	Type	Value	Form
Calcium carbonate (CAS 1317-65-3)	TWA	10 mg/m3	
Iron oxide (Fe2O3) (CAS 1309-37-1)	TWA	5 mg/m3	Dust and fume.
Quartz (CAS 14808-60-7)	TWA	0,05 mg/m3	Respirable fraction.

Romania. OELs. Protection of workers from exposure to chemical agents at the workplace

Components	Type	Value	Form
Iron oxide (Fe2O3) (CAS 1309-37-1)	STEL	10 mg/m3	Dust and fume.
	TWA	5 mg/m3	Dust and fume.

Romania. OELs. Protection of workers from exposure to chemical agents at the workplace

Components	Type	Value	Form
Triethylenetetramine (CAS 112-24-3)	STEL	20 mg/m3	
		3 ppm	
	TWA	10 mg/m3	
		1 ppm	

Slovakia. OELs. Decree of the government of the Slovak Republic concerning protection of health in work with chemical agents

Components	Type	Value	Form
Calcium carbonate (CAS 1317-65-3)	TWA	10 mg/m3	
Iron oxide (Fe2O3) (CAS 1309-37-1)	TWA	4 mg/m3	Inhalable fume.
		1,5 mg/m3	Respirable fume.
Quartz (CAS 14808-60-7)	TWA	0,1 mg/m3	

Slovenia. OELs. Regulations concerning protection of workers against risks due to exposure to chemicals while working (Official Gazette of the Republic of Slovenia)

Components	Type	Value	Form
4-Tert-butylphenol (CAS 98-54-4)	TWA	0,5 mg/m3	
		0,08 ppm	
Quartz (CAS 14808-60-7)	TWA	0,15 mg/m3	Respirable fraction.

Spain. Occupational Exposure Limits

Components	Type	Value	Form
Iron oxide (Fe2O3) (CAS 1309-37-1)	TWA	5 mg/m3	Dust and fume.
Quartz (CAS 14808-60-7)	TWA	0,1 mg/m3	Respirable fraction.

Sweden. Occupational Exposure Limit Values

Components	Type	Value	Form
Iron oxide (Fe2O3) (CAS 1309-37-1)	TWA	3,5 mg/m3	Respirable dust.
Quartz (CAS 14808-60-7)	TWA	0,1 mg/m3	Respirable dust.
Triethylenetetramine (CAS 112-24-3)	STEL	12 mg/m3	
		2 ppm	
	TWA	6 mg/m3	
		1 ppm	

Switzerland. SUVA Grenzwerte am Arbeitsplatz

Components	Type	Value	Form
4-Tert-butylphenol (CAS 98-54-4)	STEL	1 mg/m3	
		0,16 ppm	
	TWA	0,5 mg/m3	
		0,08 ppm	
Calcium carbonate (CAS 1317-65-3)	TWA	3 mg/m3	Respirable dust.
Iron oxide (Fe2O3) (CAS 1309-37-1)	TWA	3 mg/m3	Respirable dust.
Quartz (CAS 14808-60-7)	TWA	0,15 mg/m3	Respirable dust.

UK. EH40 Workplace Exposure Limits (WELs)

Components	Type	Value	Form
Calcium carbonate (CAS 1317-65-3)	TWA	4 mg/m3	Respirable dust.
		4 mg/m3	Respirable.
		10 mg/m3	Inhalable
		10 mg/m3	Inhalable dust.
Iron oxide (Fe2O3) (CAS 1309-37-1)	STEL	10 mg/m3	Fume.
	TWA	5 mg/m3	Fume.

UK. EH40 Workplace Exposure Limits (WELs)

Components	Type	Value	Form
		4 mg/m3	Respirable.
		10 mg/m3	Inhalable
Quartz (CAS 14808-60-7)	TWA	0,1 mg/m3	Respirable.

Biological limit values

Germany. TRGS 903, BAT List (Biological Limit Values)

Components	Value	Determinant	Specimen	Sampling time
4-Tert-butylphenol (CAS 98-54-4)	2 mg/l	PTBP	Urine	*

* - For sampling details, please see the source document.

Switzerland. BAT-Werte (Biological Limit Values in the Workplace as per SUVA)

Components	Value	Specimen	Sampling time
4-Tert-butylphenol (CAS 98-54-4)	2 mg/l	Urine	*

* - For sampling details, please see the source document.

Recommended monitoring procedures Follow standard monitoring procedures.

Derived no-effect level (DNEL)

Components	Type	Route	Value	Form
2,4,6-Tris-(dimethylaminomethyl)- phenol (CAS 90-72-2)	Workers	Dermal	0,2 mg/kg/day	Long term exposure systemic effects
		Inhalation	0,31 mg/m3	Long term exposure systemic effects

Predicted no effect concentrations (PNECs)

Components	Type	Route	Value	Form
2,4,6-Tris-(dimethylaminomethyl)- phenol (CAS 90-72-2)	Aqua (freshwater)	Not applicable	0,084 mg/l	
	Aqua (intermittent releases)	Not applicable	0,84 mg/l	
	Aqua (marine water)	Not applicable	0,0084 mg/l	
	STP	Not applicable	0,2 mg/l	

8.2. Exposure controls

Appropriate engineering controls Ensure adequate ventilation, especially in confined areas. Observe occupational exposure limits and minimise the risk of exposure.

Individual protection measures, such as personal protective equipment

Eye/face protection Wear safety glasses with side shields (or goggles).

Skin protection

- Hand protection Wear protective gloves. Suitable gloves can be recommended by the glove supplier. Be aware that the liquid may penetrate the gloves. Frequent change is advisable.

- Other Wear chemical-resistant gloves, footwear and protective clothing appropriate for risk of exposure. Contact chemical protective clothing manufacturer for specific information.

Respiratory protection In case of inadequate ventilation or risk of inhalation of vapours, use suitable respiratory equipment with combination filter. Use respiratory equipment with combination filter, type A2/P2.

Thermal hazards Wear appropriate thermal protective clothing, when necessary.

Hygiene measures Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment to remove contaminants.

Environmental exposure controls Environmental manager must be informed of all major spillages.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Appearance

Physical state Solid.

Form Putty.

Colour Dark yellow.

Odour Slightly ammoniacal.

Odour threshold	Not available.
pH	Not applicable.
Melting point/freezing point	Not available.
Initial boiling point and boiling range	Not available.
Flash point	Not applicable.
Evaporation rate	Not applicable.
Flammability (solid, gas)	Not applicable.
Upper/lower flammability or explosive limits	
Flammability limit - lower (%)	Not available.
Flammability limit - upper (%)	Not available.
Vapour pressure	Not applicable.
Vapour density	Not applicable.
Relative density	2 (20 °C)
Solubility(ies)	Insoluble in water.
Partition coefficient (n-octanol/water)	Not available.
Decomposition temperature	Not available.
Viscosity	Not applicable.
Explosive properties	Not available.
Oxidizing properties	Not available.
9.2. Other information	No relevant additional information available.

SECTION 10: Stability and reactivity

10.1. Reactivity	The product is non-reactive under normal conditions of use, storage and transport.
10.2. Chemical stability	Material is stable under normal conditions.
10.3. Possibility of hazardous reactions	Hazardous polymerisation does not occur.
10.4. Conditions to avoid	Heat, sparks, flames. Contact with incompatible materials.
10.5. Incompatible materials	Strong oxidising agents. Strong acids. Strong bases.
10.6. Hazardous decomposition products	Carbon oxides. Silicon oxides. Low molecular weight organic compounds.

SECTION 11: Toxicological information

General information	Occupational exposure to the substance or mixture may cause adverse effects.
Information on likely routes of exposure	
Ingestion	Swallowing or vomiting of the liquid may result in aspiration into the lungs. Ingestion may cause nausea, headache and dizziness.
Inhalation	May cause irritation to the respiratory system.
Skin contact	May cause skin irritation. May cause an allergic skin reaction.
Eye contact	May cause eye irritation. May cause redness and pain.
Symptoms	Sensitisation. May cause skin and eye irritation. Dust may irritate respiratory system.

11.1. Information on toxicological effects

Acute toxicity	May cause eye, skin and respiratory tract irritation.
Skin corrosion/irritation	May cause skin irritation.
Serious eye damage/irritation	Not available.
Respiratory sensitisation	Not classified.
Skin sensitisation	May cause sensitisation by skin contact.
Germ cell mutagenicity	Not classified.
Carcinogenicity	

IARC Monographs. Overall Evaluation of Carcinogenicity

Quartz (CAS 14808-60-7)	1 Carcinogenic to humans.

Reproductive toxicity	Not available.

Specific target organ toxicity - single exposure	Not available.
Specific target organ toxicity - repeated exposure	Causes damage to organs (Lungs) through prolonged or repeated exposure.
Aspiration hazard	Not classified.
Mixture versus substance information	None known.
Other information	Not available.

SECTION 12: Ecological information

12.1. Toxicity

Components		Species	Test results
4-Tert-butylphenol (CAS 98-54-4)			
Aquatic			
Crustacea	EC50	Water flea (Daphnia magna)	3,4 - 4,5 mg/l, 48 hours
Fish	LC50	Fathead minnow (Pimephales promelas)	4,71 - 5,62 mg/l, 96 hours

12.2. Persistence and degradability	Not available.
12.3. Bioaccumulative potential	Not available.
Partition coefficient n-octanol/water (log Kow)	Not available.
Bioconcentration factor (BCF)	Not available.
12.4. Mobility in soil	Not available.
12.5. Results of PBT and vPvB assessment	Not a PBT or vPvB substance or mixture.
12.6. Other adverse effects	Harmful to aquatic life with long lasting effects.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Residual waste	Dispose of waste and residues in accordance with local authority requirements.
Contaminated packaging	Since emptied containers may retain product residue, follow label warnings even after container is emptied.
EU waste code	08 04 09* The Waste code should be assigned in discussion between the user, the producer and the waste disposal company.
Disposal methods/information	Dispose of contents/container in accordance with local/regional/national/international regulations. The waste code should be assigned in discussion between the user and the waste disposal company. Contract with a licensed chemical disposal company (i.e., a permitted treatment, storage or disposal facility).

SECTION 14: Transport information

ADR

The product is not covered by international regulation on the transport of dangerous goods.

RID

The product is not covered by international regulation on the transport of dangerous goods.

ADN

The product is not covered by international regulation on the transport of dangerous goods.

IATA

The product is not covered by international regulation on the transport of dangerous goods.

IMDG

The product is not covered by international regulation on the transport of dangerous goods.

SECTION 15: Regulatory information

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

EU regulations

Regulation (EC) No. 1005/2009 on substances that deplete the ozone layer, Annex I

Not listed.

Regulation (EC) No. 1005/2009 on substances that deplete the ozone layer, Annex II

Not listed.

Regulation (EC) No. 850/2004 On persistent organic pollutants, Annex I as amended

Not listed.

Regulation (EC) No. 689/2008 concerning the export and import of dangerous chemicals, Annex I, part 1 as amended

Not listed.

Regulation (EC) No. 689/2008 concerning the export and import of dangerous chemicals, Annex I, part 2 as amended

Not listed.

Regulation (EC) No. 689/2008 concerning the export and import of dangerous chemicals, Annex I, part 3 as amended

Not listed.

Regulation (EC) No. 689/2008 concerning the export and import of dangerous chemicals, Annex V as amended

Not listed.

Regulation (EC) No. 166/2006 Annex II Pollutant Release and Transfer Registry

Not listed.

Regulation (EC) No. 1907/2006, REACH Article 59(1) Candidate List as currently published by ECHA

Not listed.

Authorisations

Regulation (EC) No. 143/2011 Annex XIV Substances Subject to Authorisation

Not listed.

Restrictions on use

Regulation (EC) No. 1907/2006, REACH Annex XVII Substances subject to restriction on marketing and use as amended

Not listed.

Directive 2004/37/EC: on the protection of workers from the risks related to exposure to carcinogens and mutagens at work

Not regulated.

Directive 92/85/EEC: on the safety and health of pregnant workers and workers who have recently given birth or are breastfeeding

Not regulated.

Other EU regulations

Directive 96/82/EC (Seveso II) on the control of major-accident hazards involving dangerous substances

Not regulated.

Directive 98/24/EC on the protection of the health and safety of workers from the risks related to chemical agents at work

2,4,6-Tris-(dimethylaminomethyl)- phenol (CAS 90-72-2)
Triethylenetetramine (CAS 112-24-3)

Directive 94/33/EC on the protection of young people at work

Triethylenetetramine (CAS 112-24-3)

Other regulations	The product is classified and labelled in accordance with EC directives or respective national laws. This Safety Data Sheet complies with the requirements of Regulation (EC) No 1907/2006.
National regulations	Follow national regulation for work with chemical agents. Young people under 18 years old are not allowed to work with this product according to EU Directive 94/33/EC on the protection of young people at work.
15.2. Chemical safety assessment	No Chemical Safety Assessment has been carried out.

SECTION 16: Other information

List of abbreviations	DNEL: Derived No-Effect Level. PNEC: Predicted No-Effect Concentration. PBT: Persistent, bioaccumulative and toxic. vPvB: Very Persistent and very Bioaccumulative.
References	HSDB® - Hazardous Substances Data Bank Registry of Toxic Effects of Chemical Substances (RTECS) IUCLID Dataset (European Chemicals Bureau)
Information on evaluation method leading to the classification of mixture	The classification for health and environmental hazards is derived by a combination of calculation methods and test data, if available.

Full text of any statements or R-phrases and H-statements under Sections 2 to 15	R21 Harmful in contact with skin. R22 Harmful if swallowed. R34 Causes burns. R36/38 Irritating to eyes and skin. R43 May cause sensitisation by skin contact. R48/20 Harmful: danger of serious damage to health by prolonged exposure through inhalation. R52/53 Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment. H302 - Harmful if swallowed. H312 - Harmful in contact with skin. H314 - Causes severe skin burns and eye damage. H315 - Causes skin irritation. H317 - May cause an allergic skin reaction. H319 - Causes serious eye irritation. H372 - Causes damage to organs through prolonged or repeated exposure. H411 - Toxic to aquatic life with long lasting effects. H412 - Harmful to aquatic life with long lasting effects.
Training information	Follow training instructions when handling this material.
Disclaimer	The information in the sheet was written based on the best knowledge and experience currently available. The information in this MSDS was obtained from sources which we believe are reliable, but no warranty or representation as to its accuracy or completeness is hereby given. Users should consider the information herein only as a supplement to other information gathered by them and must make independent determinations of suitability and completeness of information from all sources to assure proper use and disposal, the safety and health of employees and customers and the protection of the environment.