

**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** S-210 SILICA FREE  
**Registration number** -  
**Synonyms** None.  
**Product code** 900-0037  
**Issue date** 14-February-2013  
**Version number** 01  
**Revision date** 14-February-2013  
**Supersedes date** 07-December-2011

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

**Identified uses** Industrial Leak Sealant  
**Uses advised against** None known.

**1.3. Details of the supplier of the safety data sheet****Supplier**

**Company name** Team Industrial Services, Inc.  
**Address** Postbus 37 4380 AA Vlissingen 3237  
The Netherlands  
**Telephone** +31 (0) 118 48 58 00  
Fax +31 (0) 118 48 58 86  
**e-mail** Not available.  
**Contact person** Not available.

**1.4. Emergency telephone number** +1 703-527-3887

**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;R21/22, Xi;R36/38

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

<b>Health hazards</b>		
Skin corrosion/irritation	Category 2	H315 - Causes skin irritation.
Serious eye damage/eye irritation	Category 1	H318 - Causes serious eye damage.

**Hazard summary**

**Physical hazards** Not classified for physical hazards.  
**Health hazards** Harmful in contact with skin and if swallowed. Irritating to eyes and skin. Occupational exposure to the substance or mixture may cause adverse health effects.  
**Environmental hazards** Not classified for hazards to the environment.  
**Specific hazards** Harmful in contact with skin and if swallowed. Irritating to eyes and skin. When cured: Inhalation of high concentrations of quartz dust can lead to the lung disease known as silicosis, with cough and shortness of breath.  
**Main symptoms** Unconsciousness. Irritation of nose and throat. Irritation of eyes and mucous membranes. Symptoms include itching, burning, redness and tearing. Be aware that symptoms of lung oedema (shortness of breath) may develop up to 24 hours after exposure.

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

**Contains:** m-Cresol, p-Cresol

## Hazard pictograms



**Signal word** Danger  
**Hazard statements** H318 - Causes serious eye damage.  
H315 - Causes skin irritation.

## Precautionary statements

**Prevention** P280 - Wear protective gloves/protective clothing/eye protection/face protection.  
**Response** P302 + P352 - IF ON SKIN: Wash with plenty of soap and 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.  
P310 - Immediately call a POISON CENTRE or doctor/physician.  
**Storage** Store away from incompatible materials.  
**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
Aluminium hydroxide	25-50	21645-51-2 244-492-7	-	-	
<b>Classification:</b>					
<b>DSD:</b>	-				
<b>CLP:</b>	-				
Aluminium oxide	25-50	1344-28-1 215-691-6	-	-	
<b>Classification:</b>					
<b>DSD:</b>	-				
<b>CLP:</b>	-				
Phenol, polymer with formaldehyde	10-25	9003-35-4 500-005-2	-	-	
<b>Classification:</b>					
<b>DSD:</b>	-				
<b>CLP:</b>	-				
Ethanol	5-10	64-17-5 200-578-6	-	603-002-00-5	
<b>Classification:</b>					
<b>DSD:</b>	F;R11				
<b>CLP:</b>	Flam. Liq. 2;H225				
Graphite	5-10	7782-42-5 231-955-3	-	-	
<b>Classification:</b>					
<b>DSD:</b>	-				
<b>CLP:</b>	-				
Carbon fiber	<5	7440-44-0 231-153-3	-	-	
<b>Classification:</b>					
<b>DSD:</b>	-				
<b>CLP:</b>	-				

Chemical name	%	CAS-No. / EC No.	REACH Registration No.	INDEX No.	Notes
m-Cresol	<5	108-39-4 203-577-9	-	604-004-00-9	#
<b>Classification:</b>	<b>DSD:</b> T;R24/25, C;R34				
	<b>CLP:</b> Acute Tox. 3;H301, Acute Tox. 3;H311, Skin Corr. 1B;H314				
p-Cresol	<5	106-44-5 203-398-6	-	604-004-00-9	#
<b>Classification:</b>	<b>DSD:</b> T;R24/25, C;R34				
	<b>CLP:</b> Acute Tox. 3;H301, Acute Tox. 3;H311, Skin Corr. 1B;H314				
2,6-Xylenol	<1	576-26-1 209-400-1	-	604-006-00-X	
<b>Classification:</b>	<b>DSD:</b> T;R24/25, C;R34, N;R51/53				
	<b>CLP:</b> Acute Tox. 3;H301, Acute Tox. 3;H311, Skin Corr. 1B;H314, Eye Dam. 1;H318, Aquatic Chronic 2;H411				
Hexamethylenetetramine	<1	100-97-0 202-905-8	-	612-101-00-2	
<b>Classification:</b>	<b>DSD:</b> F;R11, R43				
	<b>CLP:</b> Flam. Sol. 2;H228, Skin Sens. 1;H317				
Phenol	<1	108-95-2 203-632-7	-	604-001-00-2	#
<b>Classification:</b>	<b>DSD:</b> Muta. Cat. 3;R68, T;R23/24/25, C;R34, Xn;R48/20/21/22				
	<b>CLP:</b> Acute Tox. 3;H301, Acute Tox. 3;H311, Skin Corr. 1B;H314, Acute Tox. 3;H331, Muta. 2;H341, STOT RE 2;H373				
o-Ethylphenol	<1	90-00-6	-	-	
<b>Classification:</b>	<b>DSD:</b> -				
	<b>CLP:</b> -				

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

DSD: Directive 67/548/EEC.

CLP: Regulation No. 1272/2008.

**Composition comments** The full text for all R- and H-phrases is displayed in section 16. All concentrations are in percent by weight.

## SECTION 4: First aid measures

**General information** Chemical burns must be treated by a physician.

### 4.1. Description of first aid measures

<b>Inhalation</b>	For breathing difficulties, oxygen may be necessary. If breathing stops, provide artificial respiration. Get medical attention immediately.
<b>Skin contact</b>	Immediately flush with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Get medical attention immediately.
<b>Eye contact</b>	Flush thoroughly with water for at least 15 minutes. Get immediate medical assistance. If medical assistance is not immediately available, flush an additional 15 minutes. Continue rinsing.
<b>Ingestion</b>	Rinse mouth thoroughly with water and give large amounts of milk or water to people not unconscious. Only induce vomiting at the instruction of medical personnel. If vomiting occurs, keep head low so that stomach content doesn't get into the lungs. Get medical attention immediately.

**4.2. Most important symptoms and effects, both acute and delayed** Unconsciousness. Coughing. Shortness of breath. Irritation of nose and throat. Irritation of eyes and mucous membranes. Symptoms include itching, burning, redness and tearing.

**4.3. Indication of any immediate medical attention and special treatment needed** Be aware that symptoms of lung oedema (shortness of breath) may develop up to 24 hours after exposure.

## SECTION 5: Firefighting measures

<b>General fire hazards</b>	Combustible liquid.
<b>5.1. Extinguishing media</b>	
<b>Suitable extinguishing media</b>	Extinguish with foam, carbon dioxide, dry powder or water fog.
<b>Unsuitable extinguishing media</b>	No restrictions known.
<b>5.2. Special hazards arising from the substance or mixture</b>	Solvent vapours may form explosive mixtures with air. By heating and fire, corrosive vapours/gases may be formed. Carbon oxides. Silicon oxides. Formaldehyde.
<b>5.3. Advice for firefighters</b>	
<b>Special protective equipment for firefighters</b>	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.
<b>Special fire fighting procedures</b>	In the event of fire, cool tanks with water spray. Move containers from fire area if you can do it 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** Ventilate closed spaces before entering. Avoid inhalation of vapours and contact with skin and eyes. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Wear appropriate protective equipment and clothing during clean-up. See Section 8 for personal protective equipment.

**For emergency responders** Use personal protection as recommended in section 8 of the SDS.

**6.2. Environmental precautions** Prevent further leakage or spillage if safe to do so.

**6.3. Methods and material for containment and cleaning up** Stop the flow of material, if this is without risk. Prevent entry into waterways, sewers, basements or confined areas. Absorb with earth, sand or other non-combustible material and transfer to containers for later disposal. After removal flush contaminated area thoroughly with water.

Never return spills to original containers for re-use. This material and its container must be disposed of as hazardous waste.

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

## SECTION 7: Handling and storage

**7.1. Precautions for safe handling** Use only with adequate ventilation. Avoid inhalation of vapours and contact with skin and eyes. Wear approved safety goggles. Wear protective gloves and appropriate clothing to prevent skin contact. Observe good industrial hygiene practices. When cured: Avoid generation and spreading of dust.

**7.2. Conditions for safe storage, including any incompatibilities** Store in tightly closed original container in a dry, cool and well-ventilated place.

**7.3. Specific end use(s)** Industrial Leak Sealant

## SECTION 8: Exposure controls/personal protection

### 8.1. Control parameters

#### Occupational exposure limits

##### Austria. MAK List

Components	Type	Value	Form
Aluminium hydroxide (CAS 21645-51-2)	MAK	5 mg/m <sup>3</sup>	Respirable fraction.
	STEL	10 mg/m <sup>3</sup>	Inhalable fraction.
		20 mg/m <sup>3</sup>	Inhalable fraction.
Aluminium oxide (CAS 1344-28-1)	MAK	10 mg/m <sup>3</sup>	Respirable fraction.
		5 mg/m <sup>3</sup>	Respirable fume.
	STEL	5 mg/m <sup>3</sup>	Respirable fraction.
		10 mg/m <sup>3</sup>	Inhalable fraction.
		20 mg/m <sup>3</sup>	Inhalable fraction.
Carbon fiber (CAS 7440-44-0)	MAK	10 mg/m <sup>3</sup>	Respirable fume.
		10 mg/m <sup>3</sup>	Respirable fraction.
		5 mg/m <sup>3</sup>	Respirable dust.

**Austria. MAK List**

Components	Type	Value	Form
Ethanol (CAS 64-17-5)	STEL	10 mg/m3	Respirable dust.
	Ceiling	3800 mg/m3	
	MAK	2000 ppm	
Graphite (CAS 7782-42-5)	MAK	1900 mg/m3	Respirable dust.
	STEL	1000 ppm	
	Ceiling	5 mg/m3	
m-Cresol (CAS 108-39-4)	MAK	10 mg/m3	Respirable dust.
	STEL	44 mg/m3	
	Ceiling	10 ppm	
p-Cresol (CAS 106-44-5)	MAK	22 mg/m3	
	STEL	5 ppm	
	Ceiling	44 mg/m3	
	MAK	10 ppm	
	STEL	22 mg/m3	
	Ceiling	5 ppm	

**Belgium. Exposure Limit Values.**

Components	Type	Value	Form
Aluminium oxide (CAS 1344-28-1)	TWA	1 mg/m3	Respirable fraction.
Carbon fiber (CAS 7440-44-0)	TWA	2 mg/m3	Respirable fraction.
Ethanol (CAS 64-17-5)	TWA	1907 mg/m3	
		1000 ppm	
Graphite (CAS 7782-42-5)	TWA	2 mg/m3	Respirable fraction.
m-Cresol (CAS 108-39-4)	TWA	22 mg/m3	
		5 ppm	
p-Cresol (CAS 106-44-5)	TWA	22 mg/m3	
		5 ppm	

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

Components	Type	Value	Form
Aluminium oxide (CAS 1344-28-1)	TWA	10 mg/m3	Dust.
Carbon fiber (CAS 7440-44-0)	TWA	1,5 mg/m3	Respirable fraction.
		5 mg/m3	Inhalable fraction.
Ethanol (CAS 64-17-5)	TWA	1000 mg/m3	
Graphite (CAS 7782-42-5)	TWA	5 mg/m3	Inhalable fraction.
Hexamethylenetetramine (CAS 100-97-0)	TWA	2 mg/m3	
m-Cresol (CAS 108-39-4)	TWA	22 mg/m3	
p-Cresol (CAS 106-44-5)	TWA	22 mg/m3	

**Cyprus. OELs. Control of factory atmosphere and dangerous substances in factories regulation, PI 311/73, as amended.**

Components	Type	Value
Carbon fiber (CAS 7440-44-0)	TWA	10 mg/m3
Graphite (CAS 7782-42-5)	TWA	10 mg/m3

**Czech Republic. OELs. Government Decree 361**

Components	Type	Value	Form
Aluminium oxide (CAS 1344-28-1)	TWA	0,1 mg/m3	Respirable dust.
Carbon fiber (CAS 7440-44-0)	TWA	10 mg/m3	Respirable dust.
		10 mg/m3	Total dust.
Ethanol (CAS 64-17-5)	Ceiling	3000 mg/m3	
	TWA	1000 mg/m3	
Graphite (CAS 7782-42-5)	TWA	10 mg/m3	Total dust.
		10 mg/m3	Respirable dust.
m-Cresol (CAS 108-39-4)	Ceiling	40 mg/m3	

**Czech Republic. OELs. Government Decree 361**

Components	Type	Value	Form
p-Cresol (CAS 106-44-5)	TWA	20 mg/m <sup>3</sup>	
	Ceiling	40 mg/m <sup>3</sup>	
Phenol, polymer with formaldehyde (CAS 9003-35-4)	TWA	20 mg/m <sup>3</sup>	
	TWA	5 mg/m <sup>3</sup>	Dust.

**Denmark. Exposure Limit Values**

Components	Type	Value	Form
Aluminium oxide (CAS 1344-28-1)	TLV	5 mg/m <sup>3</sup>	Total
		2 mg/m <sup>3</sup>	Respirable.
Carbon fiber (CAS 7440-44-0)	TLV	2,5 mg/m <sup>3</sup>	Respirable.
Ethanol (CAS 64-17-5)	TLV	1900 mg/m <sup>3</sup>	
		1000 ppm	
Graphite (CAS 7782-42-5)	TLV	2,5 mg/m <sup>3</sup>	Respirable.
m-Cresol (CAS 108-39-4)	TLV	22 mg/m <sup>3</sup>	
		5 ppm	
p-Cresol (CAS 106-44-5)	TLV	22 mg/m <sup>3</sup>	
		5 ppm	

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

Components	Type	Value	Form
Aluminium oxide (CAS 1344-28-1)	TWA	4 mg/m <sup>3</sup>	Respirable dust.
		10 mg/m <sup>3</sup>	Total dust.
Carbon fiber (CAS 7440-44-0)	TWA	3 mg/m <sup>3</sup>	Dust.
Ethanol (CAS 64-17-5)	STEL	1900 mg/m <sup>3</sup>	
	TWA	1000 ppm 1000 mg/m <sup>3</sup>	
Graphite (CAS 7782-42-5)	TWA	500 ppm 5 mg/m <sup>3</sup>	Dust.
Hexamethylenetetramine (CAS 100-97-0)	STEL	5 mg/m <sup>3</sup>	
		3 mg/m <sup>3</sup>	
m-Cresol (CAS 108-39-4)	TWA	22 mg/m <sup>3</sup>	
		5 ppm	
p-Cresol (CAS 106-44-5)	TWA	22 mg/m <sup>3</sup>	
		5 ppm	

**Finland. Workplace Exposure Limits**

Components	Type	Value
Carbon fiber (CAS 7440-44-0)	TWA	2 mg/m <sup>3</sup>
Ethanol (CAS 64-17-5)	STEL	2500 mg/m <sup>3</sup>
		1300 ppm
		1900 mg/m <sup>3</sup>
Graphite (CAS 7782-42-5)	TWA	1000 ppm
	TWA	2 mg/m <sup>3</sup>
m-Cresol (CAS 108-39-4)	STEL	45 mg/m <sup>3</sup>
	TWA	10 ppm
p-Cresol (CAS 106-44-5)	STEL	22 mg/m <sup>3</sup>
		5 ppm
		45 mg/m <sup>3</sup>
		10 ppm
	TWA	22 mg/m <sup>3</sup>
		5 ppm
		22 mg/m <sup>3</sup>

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

Components	Type	Value	Form
Aluminium oxide (CAS 1344-28-1)	VME	10 mg/m <sup>3</sup>	
Carbon fiber (CAS 7440-44-0)	VME	2 mg/m <sup>3</sup>	Respirable fraction.
Ethanol (CAS 64-17-5)	VLE	9500 mg/m <sup>3</sup> 5000 ppm	
	VME	1900 mg/m <sup>3</sup> 1000 ppm	
Graphite (CAS 7782-42-5)	VME	2 mg/m <sup>3</sup>	Respirable fraction.
m-Cresol (CAS 108-39-4)	VME	22 mg/m <sup>3</sup> 5 ppm	
p-Cresol (CAS 106-44-5)	VME	22 mg/m <sup>3</sup> 5 ppm	

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

Components	Type	Value	Form
Aluminium hydroxide (CAS 21645-51-2)	TWA	4 mg/m <sup>3</sup>	Inhalable dust.
		1,5 mg/m <sup>3</sup>	Respirable dust.
Aluminium oxide (CAS 1344-28-1)	TWA	4 mg/m <sup>3</sup>	Inhalable dust.
		1,5 mg/m <sup>3</sup>	Respirable dust.
Carbon fiber (CAS 7440-44-0)	TWA	4 mg/m <sup>3</sup>	Inhalable fraction.
		1,5 mg/m <sup>3</sup>	Respirable fraction.
Ethanol (CAS 64-17-5)	TWA	960 mg/m <sup>3</sup> 500 ppm	
Graphite (CAS 7782-42-5)	TWA	4 mg/m <sup>3</sup> 1,5 mg/m <sup>3</sup>	Inhalable fraction. Respirable fraction.

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

Components	Type	Value	Form
Aluminium hydroxide (CAS 21645-51-2)	AGW	3 mg/m <sup>3</sup>	Respirable fraction.
		10 mg/m <sup>3</sup>	Inhalable fraction.
Aluminium oxide (CAS 1344-28-1)	AGW	3 mg/m <sup>3</sup>	Respirable fraction.
		10 mg/m <sup>3</sup>	Inhalable fraction.
Carbon fiber (CAS 7440-44-0)	AGW	3 mg/m <sup>3</sup>	Respirable fraction.
		10 mg/m <sup>3</sup>	Inhalable fraction.
Ethanol (CAS 64-17-5)	AGW	960 mg/m <sup>3</sup> 500 ppm	
Graphite (CAS 7782-42-5)	AGW	3 mg/m <sup>3</sup> 10 mg/m <sup>3</sup>	Respirable fraction. Inhalable fraction.

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

Components	Type	Value	Form
Aluminium oxide (CAS 1344-28-1)	TWA	5 mg/m <sup>3</sup>	Inhalable
		10 mg/m <sup>3</sup>	Respirable.
Carbon fiber (CAS 7440-44-0)	TWA	5 mg/m <sup>3</sup>	Respirable.
		10 mg/m <sup>3</sup>	Inhalable
Ethanol (CAS 64-17-5)	TWA	1900 mg/m <sup>3</sup> 1000 ppm	
Graphite (CAS 7782-42-5)	TWA	5 mg/m <sup>3</sup> 10 mg/m <sup>3</sup>	Respirable. Inhalable
m-Cresol (CAS 108-39-4)	TWA	22 mg/m <sup>3</sup> 5 ppm	
p-Cresol (CAS 106-44-5)	TWA	22 mg/m <sup>3</sup> 5 ppm	

**Hungary. OELs. Joint Decree on Chemical Safety of Workplaces**

Components	Type	Value	Form
Aluminium oxide (CAS 1344-28-1)	TWA	6 mg/m3	Respirable.
Ethanol (CAS 64-17-5)	STEL	7600 mg/m3	
	TWA	1900 mg/m3	
m-Cresol (CAS 108-39-4)	STEL	22 mg/m3	
	TWA	22 mg/m3	
p-Cresol (CAS 106-44-5)	STEL	22 mg/m3	
	TWA	22 mg/m3	

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

Components	Type	Value	Form
Aluminium oxide (CAS 1344-28-1)	TWA	10 mg/m3	
Carbon fiber (CAS 7440-44-0)	TWA	5 mg/m3	Total dust.
		2,5 mg/m3	Respirable dust.
Ethanol (CAS 64-17-5)	TWA	1900 mg/m3	
		1000 ppm	
Graphite (CAS 7782-42-5)	TWA	5 mg/m3	Total dust.
		2,5 mg/m3	Respirable dust.
Hexamethylenetetramine (CAS 100-97-0)	TWA	3 mg/m3	
m-Cresol (CAS 108-39-4)	TWA	22 mg/m3	
		5 ppm	
p-Cresol (CAS 106-44-5)	TWA	22 mg/m3	
		5 ppm	

**Ireland. Occupational Exposure Limits**

Components	Type	Value	Form
Aluminium oxide (CAS 1344-28-1)	TWA	4 mg/m3	Respirable dust.
Carbon fiber (CAS 7440-44-0)	TWA	10 mg/m3	Total inhalable dust.
		4 mg/m3	Respirable dust.
Ethanol (CAS 64-17-5)	STEL	1000 ppm	
Graphite (CAS 7782-42-5)	TWA	4 mg/m3	Respirable dust.
		10 mg/m3	Total inhalable dust.
m-Cresol (CAS 108-39-4)	TWA	22 mg/m3	
		5 ppm	
p-Cresol (CAS 106-44-5)	TWA	22 mg/m3	
		5 ppm	

**Italy. OELs**

Components	Type	Value	Form
Aluminium hydroxide (CAS 21645-51-2)	TWA	1 mg/m3	Respirable fraction.
Aluminium oxide (CAS 1344-28-1)	TWA	1 mg/m3	Respirable fraction.
Carbon fiber (CAS 7440-44-0)	TWA	2 mg/m3	Respirable fraction.
Ethanol (CAS 64-17-5)	STEL	1000 ppm	
Graphite (CAS 7782-42-5)	TWA	2 mg/m3	Respirable fraction.
m-Cresol (CAS 108-39-4)	TWA	20 mg/m3	Inhalable fraction and vapor.
p-Cresol (CAS 106-44-5)	TWA	20 mg/m3	Inhalable fraction and vapor.

**Latvia. OELs. Occupational exposure limit values of chemical substances in work environment**

Components	Type	Value	Form
Aluminium hydroxide (CAS 21645-51-2)	TWA	6 mg/m3	
Aluminium oxide (CAS 1344-28-1)	TWA	6 mg/m3	Decomposition aerosol.



**Latvia. OELs. Occupational exposure limit values of chemical substances in work environment**

Components	Type	Value	Form
Carbon fiber (CAS 7440-44-0)	TWA	4 mg/m <sup>3</sup>	Dust.
		2 mg/m <sup>3</sup>	
Ethanol (CAS 64-17-5)	TWA	1000 mg/m <sup>3</sup>	
Graphite (CAS 7782-42-5)	TWA	2 mg/m <sup>3</sup>	Dust.
m-Cresol (CAS 108-39-4)	TWA	22 mg/m <sup>3</sup>	
		5 ppm	
p-Cresol (CAS 106-44-5)	TWA	22 mg/m <sup>3</sup>	
		5 ppm	

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

Components	Type	Value	Form
Aluminium hydroxide (CAS 21645-51-2)	TWA	6 mg/m <sup>3</sup>	
Aluminium oxide (CAS 1344-28-1)	TWA	5 mg/m <sup>3</sup>	Inhalable fraction.
		2 mg/m <sup>3</sup>	Respirable fraction.
Carbon fiber (CAS 7440-44-0)	TWA	3 mg/m <sup>3</sup>	Dust.
Ethanol (CAS 64-17-5)	STEL	1900 mg/m <sup>3</sup>	
		1000 ppm	
		1000 mg/m <sup>3</sup>	
Graphite (CAS 7782-42-5)	TWA	500 ppm	
		3 mg/m <sup>3</sup>	Dust.
Hexamethylenetetramine (CAS 100-97-0)	STEL	5 mg/m <sup>3</sup>	
m-Cresol (CAS 108-39-4)	TWA	3 mg/m <sup>3</sup>	
		22 mg/m <sup>3</sup>	
p-Cresol (CAS 106-44-5)	TWA	5 ppm	
		22 mg/m <sup>3</sup>	
		5 ppm	
Phenol, polymer with formaldehyde (CAS 9003-35-4)	TWA	3 mg/m <sup>3</sup>	Dust.

**Luxembourg. Binding Occupational exposure limit values (Annex I), Memorial A**

Components	Type	Value
m-Cresol (CAS 108-39-4)	TWA	22 mg/m <sup>3</sup>
		5 ppm
p-Cresol (CAS 106-44-5)	TWA	22 mg/m <sup>3</sup>
		5 ppm

**Malta. OELs. Occupational Exposure Limit Values (L.N. 227. of Occupational Health and Safety Authority Act (CAP. 424), Schedules I and V)**

Components	Type	Value
m-Cresol (CAS 108-39-4)	TWA	22 mg/m <sup>3</sup>
		5 ppm
p-Cresol (CAS 106-44-5)	TWA	22 mg/m <sup>3</sup>
		5 ppm

**Netherlands. OELs (binding)**

Components	Type	Value
Ethanol (CAS 64-17-5)	STEL	1900 mg/m <sup>3</sup>
	TWA	260 mg/m <sup>3</sup>

**Norway. Administrative Norms for Contaminants in the Workplace**

Components	Type	Value	Form
Aluminium oxide (CAS 1344-28-1)	TLV	10 mg/m <sup>3</sup>	
Carbon fiber (CAS 7440-44-0)	TLV	2 mg/m <sup>3</sup>	Respirable dust.
		10 mg/m <sup>3</sup>	Total dust.
Ethanol (CAS 64-17-5)	TLV	950 mg/m <sup>3</sup>	

**Norway. Administrative Norms for Contaminants in the Workplace**

Components	Type	Value	Form
Graphite (CAS 7782-42-5)	TLV	500 ppm	Respirable dust. Total dust.
		2 mg/m <sup>3</sup>	
		10 mg/m <sup>3</sup>	
Hexamethylenetetramine (CAS 100-97-0)	TLV	3 mg/m <sup>3</sup>	
m-Cresol (CAS 108-39-4)	TLV	22 mg/m <sup>3</sup>	
p-Cresol (CAS 106-44-5)	TLV	5 ppm	
		22 mg/m <sup>3</sup>	
		5 ppm	

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

Components	Type	Value	Form
Aluminium hydroxide (CAS 21645-51-2)	TWA	2,5 mg/m <sup>3</sup>	Fume, total dust.
		1,2 mg/m <sup>3</sup>	Respirable dust and/or fume.
Aluminium oxide (CAS 1344-28-1)	TWA	2,5 mg/m <sup>3</sup>	Fume, total dust.
		1,2 mg/m <sup>3</sup>	Respirable dust and/or fume.
Carbon fiber (CAS 7440-44-0)	TWA	4 mg/m <sup>3</sup>	Total dust.
Ethanol (CAS 64-17-5)	TWA	1 mg/m <sup>3</sup>	Respirable dust.
Graphite (CAS 7782-42-5)	TWA	1900 mg/m <sup>3</sup>	
		4 mg/m <sup>3</sup>	Total dust.
Hexamethylenetetramine (CAS 100-97-0)	TWA	1 mg/m <sup>3</sup>	Respirable dust.
		4 mg/m <sup>3</sup>	
m-Cresol (CAS 108-39-4)	TWA	22 mg/m <sup>3</sup>	
p-Cresol (CAS 106-44-5)	TWA	22 mg/m <sup>3</sup>	

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

Components	Type	Value	Form
Aluminium oxide (CAS 1344-28-1)	TWA	10 mg/m <sup>3</sup>	
Carbon fiber (CAS 7440-44-0)	TWA	2 mg/m <sup>3</sup>	Respirable fraction.
Ethanol (CAS 64-17-5)	TWA	1000 ppm	
Graphite (CAS 7782-42-5)	TWA	2 mg/m <sup>3</sup>	Respirable fraction.
m-Cresol (CAS 108-39-4)	TWA	5 ppm	
p-Cresol (CAS 106-44-5)	TWA	5 ppm	

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

Components	Type	Value	Form
Aluminium oxide (CAS 1344-28-1)	STEL	5 mg/m <sup>3</sup>	Aerosol
		1,2 ppm	Aerosol
		2 mg/m <sup>3</sup>	Aerosol
Ethanol (CAS 64-17-5)	STEL	0,5 ppm	Aerosol
		9500 mg/m <sup>3</sup>	
		5000 ppm	
m-Cresol (CAS 108-39-4)	TWA	1900 mg/m <sup>3</sup>	
		1000 ppm	
		22 mg/m <sup>3</sup>	
p-Cresol (CAS 106-44-5)	TWA	5 ppm	
		22 mg/m <sup>3</sup>	
		5 ppm	

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

Components	Type	Value	Form
Aluminium hydroxide (CAS 21645-51-2)	TWA	4 mg/m <sup>3</sup>	Inhalable fraction.

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

Components	Type	Value	Form
Aluminium oxide (CAS 1344-28-1)	TWA	1,5 mg/m <sup>3</sup>	Respirable fraction.
		4 mg/m <sup>3</sup>	Inhalable fraction.
Carbon fiber (CAS 7440-44-0)	TWA	1,5 mg/m <sup>3</sup>	Respirable fraction.
		0,1 mg/m <sup>3</sup>	
Ethanol (CAS 64-17-5)	TWA	2 mg/m <sup>3</sup>	Respirable fraction.
		10 mg/m <sup>3</sup>	Total
Graphite (CAS 7782-42-5)	TWA	960 mg/m <sup>3</sup>	
		500 ppm	
m-Cresol (CAS 108-39-4)	TWA	2 mg/m <sup>3</sup>	Respirable fraction.
		10 mg/m <sup>3</sup>	Total
p-Cresol (CAS 106-44-5)	TWA	22 mg/m <sup>3</sup>	
		5 ppm	
		22 mg/m <sup>3</sup>	
		5 ppm	

**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
Ethanol (CAS 64-17-5)	TWA	1900 mg/m <sup>3</sup>
		1000 ppm
m-Cresol (CAS 108-39-4)	TWA	22 mg/m <sup>3</sup>
		5 ppm
p-Cresol (CAS 106-44-5)	TWA	22 mg/m <sup>3</sup>
		5 ppm

**Spain**

Components	Type	Value	Form
Graphite (CAS 7782-42-5)	TWA (VLA-ED)	2 mg/m <sup>3</sup>	Dust.

**Spain. Occupational Exposure Limits**

Components	Type	Value	Form
Aluminium oxide (CAS 1344-28-1)	TWA	10 mg/m <sup>3</sup>	
Carbon fiber (CAS 7440-44-0)	TWA	2 mg/m <sup>3</sup>	Dust.
Ethanol (CAS 64-17-5)	TWA	1910 mg/m <sup>3</sup>	
		1000 ppm	
m-Cresol (CAS 108-39-4)	TWA	22 mg/m <sup>3</sup>	
		5 ppm	
p-Cresol (CAS 106-44-5)	TWA	22 mg/m <sup>3</sup>	
		5 ppm	

**Sweden. Occupational Exposure Limit Values**

Components	Type	Value	Form
Aluminium oxide (CAS 1344-28-1)	TWA	5 mg/m <sup>3</sup>	Total dust.
		2 mg/m <sup>3</sup>	Respirable dust.
Carbon fiber (CAS 7440-44-0)	TWA	0,2 fibers/mL	
		5 mg/m <sup>3</sup>	Total dust.
Ethanol (CAS 64-17-5)	STEL	1900 mg/m <sup>3</sup>	
	TWA	1000 ppm	
Graphite (CAS 7782-42-5)	TWA	1000 mg/m <sup>3</sup>	
		500 ppm	
Hexamethylenetetramine (CAS 100-97-0)	STEL	0,2 fibers/mL	
		5 mg/m <sup>3</sup>	Total dust.
m-Cresol (CAS 108-39-4)	TWA	5 mg/m <sup>3</sup>	
	STEL	3 mg/m <sup>3</sup>	
		9 mg/m <sup>3</sup>	

**Sweden. Occupational Exposure Limit Values**

Components	Type	Value	Form
p-Cresol (CAS 106-44-5)	TWA	2 ppm	
		4,5 mg/m <sup>3</sup>	
	STEL	1 ppm	
		9 mg/m <sup>3</sup>	
	TWA	2 ppm	
		4,5 mg/m <sup>3</sup>	
		1 ppm	

**Switzerland. SUVA Grenzwerte am Arbeitsplatz**

Components	Type	Value	Form
Aluminium hydroxide (CAS 21645-51-2)	TWA	3 mg/m <sup>3</sup>	Respirable dust.
Aluminium oxide (CAS 1344-28-1)	STEL	24 mg/m <sup>3</sup>	Fume and respirable dust.
	TWA	3 mg/m <sup>3</sup>	Fume and respirable dust.
Carbon fiber (CAS 7440-44-0)	TWA	3 mg/m <sup>3</sup>	Respirable dust.
		5 mg/m <sup>3</sup>	Inhalable dust.
Ethanol (CAS 64-17-5)	STEL	2,5 mg/m <sup>3</sup>	Respirable dust.
		1920 mg/m <sup>3</sup>	
		1000 ppm	
Graphite (CAS 7782-42-5)	TWA	960 mg/m <sup>3</sup>	Inhalable dust. Respirable dust.
		500 ppm	
		5 mg/m <sup>3</sup>	
m-Cresol (CAS 108-39-4)	STEL	2,5 mg/m <sup>3</sup>	
		22 mg/m <sup>3</sup>	
p-Cresol (CAS 106-44-5)	TWA	5 ppm	
		22 mg/m <sup>3</sup>	
		5 ppm	
p-Cresol (CAS 106-44-5)	STEL	22 mg/m <sup>3</sup>	
		5 ppm	
		22 mg/m <sup>3</sup>	
p-Cresol (CAS 106-44-5)	TWA	5 ppm	
		22 mg/m <sup>3</sup>	

**UK. EH40 Workplace Exposure Limits (WELs)**

Components	Type	Value	Form
Aluminium oxide (CAS 1344-28-1)	TWA	4 mg/m <sup>3</sup>	Respirable dust.
Carbon fiber (CAS 7440-44-0)	TWA	10 mg/m <sup>3</sup>	Inhalable dust.
		4 mg/m <sup>3</sup>	Respirable dust.
Ethanol (CAS 64-17-5)	TWA	10 mg/m <sup>3</sup>	Inhalable dust.
		1920 mg/m <sup>3</sup>	
		1000 ppm	

**United Kingdom**

Components	Type	Value	Form
Graphite (CAS 7782-42-5)	TWA	4 mg/m <sup>3</sup>	Respirable dust.
		10 mg/m <sup>3</sup>	Inhalable dust.

**EU. Indicative Exposure Limit Values in Directives 91/322/EEC, 2000/39/EC, 2006/15/EC, 2009/161/EU**

Components	Type	Value
m-Cresol (CAS 108-39-4)	TWA	22 mg/m <sup>3</sup>
		5 ppm
p-Cresol (CAS 106-44-5)	TWA	22 mg/m <sup>3</sup>
		5 ppm

## Biological limit values

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

Components	Value	Determinant	Specimen	Sampling time
Aluminium hydroxide (CAS 21645-51-2)	200 µg/l	Aluminium	Urine	*
	200 micrograms/liter	Aluminium	Urine	*
Aluminium oxide (CAS 1344-28-1)	200 micrograms/liter	Aluminium	Urine	*

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

### Hungary. Chemical Safety at Workplace Ordinance Joint Decree No. 25/2000 (Annex 2): Permissible limit values of biological exposure (effect) indices

Components	Value	Determinant	Specimen	Sampling time
Ethanol (CAS 64-17-5)	25 %	red blood cell or total blood acetylcholinest erase activity (EC. 3.1.1.7.)	Reduction from individual baseline activity in red blood cells	*
m-Cresol (CAS 108-39-4)	25 %	red blood cell or total blood acetylcholinest erase activity (EC. 3.1.1.7.)	Reduction from individual baseline activity in red blood cells	*
p-Cresol (CAS 106-44-5)	25 %	red blood cell or total blood acetylcholinest erase activity (EC. 3.1.1.7.)	Reduction from individual baseline activity in red blood cells	*

\* - 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
Aluminium hydroxide (CAS 21645-51-2)	Workers	Inhalation	3,59 mg/m3	Long term exposure local effects
Aluminium oxide (CAS 1344-28-1)	Workers	Inhalation	15,63 mg/m3	Long term exposure local effects
Ethanol (CAS 64-17-5)	Workers	Dermal	343 mg/kg/day	Long term Systemic effects
		Inhalation	950 mg/m3	Long term Systemic effects
Graphite (CAS 7782-42-5)	Workers	Inhalation	1900 mg/m3	Acute Local effects
		Inhalation	1,2 mg/m3	Long term exposure local effects
Hexamethylenetetramine (CAS 100-97-0)	Workers	Dermal	8,8 mg/kg/day	Long term Systemic effects
		Dermal	229 mg/kg/day	Acute Systemic effects
		Inhalation	31 mg/m3	Long term Systemic effects
m-Cresol (CAS 108-39-4)	Workers	Inhalation	1400 mg/m3	Acute Systemic effects
		Inhalation	343 mg/m3	Acute Systemic effects
		Inhalation	3,5 mg/m3	Long term Systemic effects
		Inhalation	0,9 mg/m3	Acute Local effects
p-Cresol (CAS 106-44-5)	Workers	Inhalation	0,9 mg/m3	Long term Local effects
		Inhalation	3,5 mg/m3	Long term Systemic effects
		Inhalation	233 mg/m3	Acute Systemic effects
		Inhalation	0,9 mg/m3	Acute Local effects

Components	Type	Route	Value	Form
		Inhalation	0,9 mg/m <sup>3</sup>	Long term exposure local effects

#### Predicted no effect concentrations (PNECs)

Components	Type	Route	Value	Form
Aluminium hydroxide (CAS 21645-51-2)	Aqua (freshwater)	Not applicable	74,9 µg/l	
	STP	Not applicable	20 mg/l	
Aluminium oxide (CAS 1344-28-1)	Aqua (freshwater)	Not applicable	74,9 µg/l	
	Sewage Treatment Plant	Not applicable	20 mg/l	
Ethanol (CAS 64-17-5)	Aqua (freshwater)	Not applicable	0,96 mg/l	
	Aqua (intermittent releases)	Not applicable	2,75 mg/l	
	Aqua (marine water)	Not applicable	0,79 mg/l	
	Oral	Not applicable	0,72 g/kg	
	Sediment (freshwater)	Not applicable	3,6 mg/kg	
	Sewage Treatment Plant	Not applicable	580 mg/l	
	Soil	Not applicable	0,63 mg/kg	
Hexamethylenetetramine (CAS 100-97-0)	Aqua (freshwater)	Not applicable	3 mg/l	
	Aqua (intermittent releases)	Not applicable	30 mg/l	
	Aqua (marine water)	Not applicable	0,5 mg/l	
	Oral	Not applicable	0,05 g/kg	
	Sediment (freshwater)	Not applicable	11 mg/kg	
	Sediment (marine water)	Not applicable	1,84 mg/kg	
	Sewage Treatment Plant	Not applicable	100 mg/l	
	Soil	Not applicable	0,58 mg/kg	
m-Cresol (CAS 108-39-4)	Aqua (freshwater)	Not applicable	0,1 mg/l	
	Aqua (intermittent releases)	Not applicable	0,076 mg/l	
	Aqua (marine water)	Not applicable	0,01 mg/l	
	Sediment (freshwater)	Not applicable	0,154 mg/kg	
	Sewage Treatment Plant	Not applicable	1,14 mg/l	
	Soil	Not applicable	0,073 mg/kg	
p-Cresol (CAS 106-44-5)	Aqua (freshwater)	Not applicable	0,03 mg/l	
	Aqua (intermittent releases)	Not applicable	0,044 mg/l	
	Aqua (marine water)	Not applicable	0,003 mg/l	
	Sediment (freshwater)	Not applicable	0,055 mg/kg	
	Sewage Treatment Plant	Not applicable	1,65 mg/l	
	Soil	Not applicable	0,029 mg/kg	

## 8.2. Exposure controls

### Appropriate engineering controls

Provide adequate ventilation. Observe Occupational Exposure Limits and minimise the risk of inhalation of vapours. An eye wash and safety shower must be available in the immediate work area.

### Individual protection measures, such as personal protective equipment

#### General information

Personal protective equipment should be chosen according to the CEN standards and in discussion with the supplier of the personal protective equipment.

#### Eye/face protection

Wear safety glasses with side shields (or goggles) and a face shield.

#### Skin protection

##### - Hand protection

Wear protective gloves. Butyl rubber gloves are recommended, but be aware that the liquid may penetrate the gloves. Frequent change is advisable.

##### - Other

Wear appropriate clothing to prevent possibility of skin contact.

#### Respiratory protection

Not available.

<b>Thermal hazards</b>	Wear appropriate thermal protective clothing, when necessary.
<b>Hygiene measures</b>	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.
<b>Environmental exposure controls</b>	Environmental manager must be informed of all major releases.

## SECTION 9: Physical and chemical properties

### 9.1. Information on basic physical and chemical properties

<b>Appearance</b>	Black pliable semi-solid with phenolic odor.
<b>Physical state</b>	Liquid.
<b>Form</b>	Pliable semi-solid.
<b>Colour</b>	Black.
<b>Odour</b>	Phenolic.
<b>Odour threshold</b>	0,003 - 5 ppm (m-Cresol)
<b>pH</b>	Not applicable.
<b>Melting point/freezing point</b>	Not applicable.
<b>Initial boiling point and boiling range</b>	Not applicable.
<b>Flash point</b>	71,1 °C (160 °F) Tag closed cup
<b>Evaporation rate</b>	Not applicable.
<b>Flammability (solid, gas)</b>	Not applicable.
<b>Upper/lower flammability or explosive limits</b>	
<b>Flammability limit - lower (%)</b>	Not available.
<b>Flammability limit - upper (%)</b>	Not available.
<b>Vapour pressure</b>	Not applicable.
<b>Vapour density</b>	Not applicable.
<b>Relative density</b>	Not available.
<b>Solubility(ies)</b>	Slightly.
<b>Partition coefficient (n-octanol/water)</b>	Not available.
<b>Decomposition temperature</b>	Not available.
<b>Viscosity</b>	Not applicable.
<b>Explosive properties</b>	Not available.
<b>Oxidizing properties</b>	Not available.
<b>9.2. Other information</b>	No relevant additional information available.

## SECTION 10: Stability and reactivity

<b>10.1. Reactivity</b>	The product is non-reactive under normal conditions of use, storage and transport.
<b>10.2. Chemical stability</b>	Material is stable under normal conditions.
<b>10.3. Possibility of hazardous reactions</b>	Hazardous polymerisation does not occur.
<b>10.4. Conditions to avoid</b>	Flames and sparks.
<b>10.5. Incompatible materials</b>	Strong oxidizers, strong acids, and strong bases. Strong reducing agents.
<b>10.6. Hazardous decomposition products</b>	Oxides of aluminium. Carbon oxides. Silicon oxides. Formaldehyde. Unidentified organic compounds.

## SECTION 11: Toxicological information

<b>General information</b>	Occupational exposure to the substance or mixture may cause adverse effects.
<b>Information on likely routes of exposure</b>	
<b>Ingestion</b>	May cause digestive tract burns.
<b>Inhalation</b>	May cause severe respiratory tract irritation. May cause burns in mucous membranes, throat, oesophagus and stomach. When cured: Chronic lung disease (silicosis) and/or lung cancer may result from prolonged/repeated breathing of the dust of this material.
<b>Skin contact</b>	Harmful in contact with skin. May cause skin burns. Components of the product may be absorbed into the body through the skin.

<b>Eye contact</b>	May cause eye burns. Risk of serious damage to eyes.
<b>Symptoms</b>	Unconsciousness. Coughing. Shortness of breath. Irritation of nose and throat. Irritation of eyes and mucous membranes. Symptoms include itching, burning, redness and tearing. Be aware that symptoms of lung oedema (shortness of breath) may develop up to 24 hours after exposure.

### 11.1. Information on toxicological effects

<b>Acute toxicity</b>	May cause eye, skin and respiratory tract irritation. May cause severe respiratory tract irritation. Harmful if inhaled or swallowed. May cause damage to the liver and kidneys.
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Components	Species	Test results
m-Cresol (CAS 108-39-4)		
<b>Acute</b>		
<i>Dermal</i>		
LD50	Rabbit	620 mg/kg
<i>Oral</i>		
LD50	Rat	242 mg/kg
p-Cresol (CAS 106-44-5)		
<b>Acute</b>		
<i>Dermal</i>		
LD50	Rabbit	300 mg/kg
<i>Oral</i>		
LD50	Rat	207 mg/kg
<b>Skin corrosion/irritation</b>	May cause skin burns.	
<b>Serious eye damage/irritation</b>	May cause eye burns. Risk of serious damage to eyes.	
<b>Respiratory sensitisation</b>	Not available.	
<b>Skin sensitisation</b>	Not a skin sensitiser.	
<b>Germ cell mutagenicity</b>	Not available.	
<b>Carcinogenicity</b>	Not classified.	
<b>Reproductive toxicity</b>	Contains no ingredient listed as toxic to reproduction	
<b>Specific target organ toxicity - single exposure</b>	Not available.	
<b>Specific target organ toxicity - repeated exposure</b>	Not available.	
<b>Aspiration hazard</b>	Not classified.	
<b>Mixture versus substance information</b>	Not available.	
<b>Other information</b>	Be aware that symptoms of lung oedema (shortness of breath) may develop up to 24 hours after exposure.	

## SECTION 12: Ecological information

<b>12.1. Toxicity</b>	The product components are not classified as environmentally hazardous. However, this does not exclude the possibility that large or frequent spills can have a harmful or damaging effect on the environment.
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Components	Species	Test results
Hexamethylenetetramine (CAS 100-97-0)		
<b>Aquatic</b>		
Crustacea	EC50	Water flea (Daphnia magna)
Fish	LC50	Bleak (Alburnus alburnus)
m-Cresol (CAS 108-39-4)		
<b>Aquatic</b>		
Crustacea	EC50	Scud (Gammarus fasciatus)
Fish	LC50	Rainbow trout, donaldson trout (Oncorhynchus mykiss)
p-Cresol (CAS 106-44-5)		
<b>Aquatic</b>		
Crustacea	EC50	Water flea (Daphnia magna)
Fish	LC50	Fish (Lepidocephalichthyes guntea)



<b>12.2. Persistence and degradability</b>	The product contains inorganic compounds which are not biodegradable.
<b>12.3. Bioaccumulative potential</b>	No data available on bioaccumulation.
<b>Partition coefficient n-octanol/water (log Kow)</b>	
p-Cresol (CAS 106-44-5)	1,94
m-Cresol (CAS 108-39-4)	1,96
<b>Bioconcentration factor (BCF)</b>	Not available.
<b>12.4. Mobility in soil</b>	No data available.
<b>Mobility in general</b>	The product is slightly soluble in water. The product contains volatile organic compounds (VOC) which will evaporate easily from all surfaces.
<b>12.5. Results of PBT and vPvB assessment</b>	Not a PBT or vPvB substance or mixture.
<b>12.6. Other adverse effects</b>	The product contains volatile organic compounds which have a photochemical ozone creation potential. The product is not classified as environmentally hazardous. However, this does not exclude the possibility that large or frequent spills can have a harmful or damaging effect on the environment.

## SECTION 13: Disposal considerations

### 13.1. Waste treatment methods

<b>Residual waste</b>	Dispose of in accordance with local regulations.
<b>Contaminated packaging</b>	Since emptied containers may retain product residue, follow label warnings even after container is emptied.
<b>EU waste code</b>	08 04 09*
<b>Disposal methods/information</b>	Disposal recommendations are based on material as supplied. Disposal must be in accordance with current applicable laws and regulations, and material characteristics at time of disposal.

## 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.

**14.7. Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code** This substance/mixture is not intended to be transported in bulk.

## 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

Hexamethylenetetramine (CAS 100-97-0)

#### 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

Hexamethylenetetramine (CAS 100-97-0)

m-Cresol (CAS 108-39-4)

p-Cresol (CAS 106-44-5)

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

Hexamethylenetetramine (CAS 100-97-0)

m-Cresol (CAS 108-39-4)

p-Cresol (CAS 106-44-5)

### Other regulations

The product is classified and labelled in accordance with Regulation (EC) 1272/2008 (CLP Regulation) as amended and respective national laws implementing EC directives. This Safety Data Sheet complies with the requirements of Regulation (EC) No 1907/2006 as amended.

### National regulations

Young people under 18 years old are not allow to work with this product according to the EU Directive 94/33/EC on the protection of young people at work. Pregnant women should not work with the product, if there is the least risk of exposure. Follow national regulation for work with chemical agents.

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

### References

Not available.

### 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

R11 Highly flammable.  
R21/22 Harmful in contact with skin and if swallowed.  
R23/24/25 Toxic by inhalation, in contact with skin and if swallowed.  
R24/25 Toxic in contact with skin and if swallowed.  
R34 Causes burns.  
R36/38 Irritating to eyes and skin.  
R43 May cause sensitisation by skin contact.  
R48/20/21/22 Harmful: danger of serious damage to health by prolonged exposure through inhalation, in contact with skin and if swallowed.  
R51/53 Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.  
R68 Possible risk of irreversible effects.  
H225 - Highly flammable liquid and vapour.  
H228 - Flammable solid.  
H301 - Toxic if swallowed.  
H311 - Toxic in contact with skin.  
H314 - Causes severe skin burns and eye damage.

H317 - May cause an allergic skin reaction.  
H318 - Causes serious eye damage.  
H331 - Toxic if inhaled.  
H341 - Suspected of causing genetic defects.  
H373 - May cause damage to organs through prolonged or repeated exposure.  
H411 - Toxic 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.