

# TEAM<sup>®</sup> Industrial Services

## 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	VALVE PACK 2 NUCLEAR GRADE
Registration number	-
Synonyms	None.
Product code	905-0028
Issue date	01-November-2012
Version number	00
Revision date	01-November-2012
Supersedes date	-

#### 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** Carc. Cat. 2;R49, Xn;R20/21/22-48/20, Xi;R36/38, R43

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 corrosion/irritation	Category 2	H315 - Causes skin irritation.
Serious eye damage/eye irritation	Category 2	H319 - Causes serious eye irritation.
Skin sensitisation	Category 1	H317 - May cause an allergic skin reaction.
Carcinogenicity	Category 1B	H350 - May cause cancer.
Specific target organ toxicity - repeated exposure	Category 1	H372 - Causes damage to organs through prolonged or repeated exposure.

##### Hazard summary

<b>Physical hazards</b>	Not classified for physical hazards.
<b>Health hazards</b>	May cause cancer by inhalation. Also harmful by inhalation, in contact with skin and if swallowed. Irritating to eyes and skin. May cause sensitisation by skin contact. Also harmful: danger of serious damage to health by prolonged exposure through inhalation.
<b>Environmental hazards</b>	Not classified for hazards to the environment.
<b>Specific hazards</b>	Inhalation of high concentrations of quartz dust can lead to the lung disease known as silicosis, with cough and shortness of breath. Repeated exposure to high concentrations of dust may adversely affect the lungs and increase the risks of developing respiratory cancer.

**Main symptoms** Irritation. May cause redness and pain. Headaches, dizziness, fatigue, nausea and vomiting. Coughing. Shortness of breath. Difficulty in breathing. Sensitisation.

**2.2. Label elements**

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

**Contains:** Formaldehyde, Quartz, Refractories, Fibers, Aluminosilicate

**Hazard pictograms**



**Signal word** Danger

**Hazard statements**  
 H315 - Causes skin irritation.  
 H319 - Causes serious eye irritation.  
 H317 - May cause an allergic skin reaction.  
 H350 - May cause cancer.  
 H372 - Causes damage to organs through prolonged or repeated exposure.

**Precautionary statements**

**Prevention** P261 - Avoid breathing dust/fume/gas/mist/vapours/spray.  
 P280 - Wear protective gloves/protective clothing/eye protection/face protection.  
 P201 - Obtain special instructions before use.

**Response** P308 + P313 - IF exposed or concerned: Get medical advice/attention.  
 P302 + P352 - IF ON SKIN: Wash with plenty of soap and water.

**Storage** P405 - Store locked up.

**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
Graphite	25-50	7782-42-5 231-955-3	-	-	
<b>Classification:</b>					<b>DSD:</b> - <b>CLP:</b> -
Quartz	10-25	14808-60-7 238-878-4	-	-	
<b>Classification:</b>					<b>DSD:</b> Xn;R48/20 <b>CLP:</b> STOT RE 1;H372
Refractories, Fibers, Aluminosilicate	<5	142844-00-6	-	650-017-00-8	
<b>Classification:</b>					<b>DSD:</b> Carc. Cat. 2;R49 <b>CLP:</b> Carc. 1B;H350
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

Chemical name	%	CAS-No. / EC No.	REACH Registration No.	INDEX No.	Notes
Formaldehyde	<1	50-00-0 200-001-8	-	605-001-00-5	
<b>Classification:</b>		<b>DSD:</b> Carc. Cat. 3;R40, T;R23/24/25, C;R34, R43			
		<b>CLP:</b> Acute Tox. 3;H301, Acute Tox. 3;H311, Skin Corr. 1B;H314, Skin Sens. 1;H317, Acute Tox. 3;H331, STOT SE 3;H335, Carc. 2;H351			
O-Ethylphenol	<1	90-00-6 201-958-4	-	-	
<b>Classification:</b>		<b>DSD:</b> Xn;R20/21/22			
		<b>CLP:</b> Acute Tox. 4;H302, Acute Tox. 4;H312, Acute Tox. 4;H332			
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			
m-Cresol	<1	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	<1	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			

DSD: Directive 67/548/EEC.

CLP: Regulation No. 1272/2008.

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

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

## 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 to fresh air. If breathing is difficult, give oxygen. Get medical attention if any discomfort occurs.

**Skin contact** Remove contaminated clothing and shoes. Flush thoroughly with water for at least 15 minutes. If irritation occurs, get medical assistance.

**Eye contact** Flush thoroughly with water for at least 15 minutes. Get medical attention if irritation develops or persists.

**Ingestion** 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** Irritation. May cause redness and pain. Headaches, dizziness, fatigue, nausea and vomiting. Coughing. Difficulty in breathing. Shortness of breath. Sensitisation.

**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** The product is not flammable. Will burn if involved in a fire.

### 5.1. Extinguishing media

**Suitable extinguishing media** Water spray, foam, dry powder or carbon dioxide.

**Unsuitable extinguishing media** No restrictions known.

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

### 5.3. Advice for firefighters

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

**Special fire fighting procedures** Use standard firefighting procedures and consider the hazards of other involved materials. Cool material exposed to heat with water spray and remove it if no risk is involved.

## SECTION 6: Accidental release measures

### 6.1. Personal precautions, protective equipment and emergency procedures

**For non-emergency personnel** Ensure adequate ventilation. Wear suitable protective clothing. Avoid contact with eyes, skin, and clothing. See Section 8 for personal protective equipment.

**For emergency responders** Keep unnecessary personnel away.

**6.2. Environmental precautions** Avoid discharge into drains, water courses or onto the ground.

**6.3. Methods and material for containment and cleaning up** Sweep up or vacuum up spillage and collect in suitable container for disposal. Collect and dispose of spillage as indicated in section 13.

**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** Use only with adequate ventilation. Wash thoroughly after handling. Observe good industrial hygiene practices. Avoid generation and spreading of dust. Avoid inhalation of dust and vapours. Avoid contact with skin and eyes.

**7.2. Conditions for safe storage, including any incompatibilities** Store in a closed container away from incompatible materials. Store in a 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
Ethanol (CAS 64-17-5)	Ceiling	3800 mg/m <sup>3</sup>	
		2000 ppm	
	MAK	1900 mg/m <sup>3</sup>	
Formaldehyde (CAS 50-00-0)	Ceiling	1000 ppm	
		0,6 mg/m <sup>3</sup>	
	MAK	0,5 ppm	
Graphite (CAS 7782-42-5)	MAK	0,6 mg/m <sup>3</sup>	
	STEL	0,5 ppm	Respirable dust.
		5 mg/m <sup>3</sup>	Respirable dust.
m-Cresol (CAS 108-39-4)	Ceiling	10 mg/m <sup>3</sup>	
		44 mg/m <sup>3</sup>	
	MAK	10 ppm	
p-Cresol (CAS 106-44-5)	MAK	22 mg/m <sup>3</sup>	
		5 ppm	
	Ceiling	44 mg/m <sup>3</sup>	
Phenol (CAS 108-95-2)	MAK	10 ppm	
		22 mg/m <sup>3</sup>	
		5 ppm	
Quartz (CAS 14808-60-7)	MAK	7,8 mg/m <sup>3</sup>	
		2 ppm	
		0,15 mg/m <sup>3</sup>	Respirable dust.

**Belgium. Exposure Limit Values.**

Components	Type	Value	Form
Ethanol (CAS 64-17-5)	TWA	1907 mg/m <sup>3</sup> 1000 ppm	
Formaldehyde (CAS 50-00-0)	STEL	0,38 mg/m <sup>3</sup> 0,3 ppm	
Graphite (CAS 7782-42-5)	TWA	2 mg/m <sup>3</sup>	Respirable fraction.
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	
Phenol (CAS 108-95-2)	STEL	16 mg/m <sup>3</sup> 4 ppm	
	TWA	8 mg/m <sup>3</sup> 2 ppm	
Quartz (CAS 14808-60-7)	TWA	0,1 mg/m <sup>3</sup>	Respirable dust.

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

Components	Type	Value	Form
Ethanol (CAS 64-17-5)	TWA	1000 mg/m <sup>3</sup>	
Formaldehyde (CAS 50-00-0)	STEL	2 mg/m <sup>3</sup>	
	TWA	1 mg/m <sup>3</sup>	
Graphite (CAS 7782-42-5)	TWA	5 mg/m <sup>3</sup>	Inhalable fraction.
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>	
Phenol (CAS 108-95-2)	TWA	7,8 mg/m <sup>3</sup>	
Quartz (CAS 14808-60-7)	TWA	0,07 mg/m <sup>3</sup>	Respirable fraction.

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

Components	Type	Value
Formaldehyde (CAS 50-00-0)	TWA	3 mg/m <sup>3</sup> 2 ppm
Graphite (CAS 7782-42-5)	TWA	10 mg/m <sup>3</sup>
Phenol (CAS 108-95-2)	TWA	19 mg/m <sup>3</sup> 5 ppm

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

Components	Type	Value	Form
Ethanol (CAS 64-17-5)	Ceiling	3000 mg/m <sup>3</sup>	
	TWA	1000 mg/m <sup>3</sup>	
Formaldehyde (CAS 50-00-0)	Ceiling	1 mg/m <sup>3</sup>	
	TWA	0,5 mg/m <sup>3</sup>	
Graphite (CAS 7782-42-5)	TWA	10 mg/m <sup>3</sup>	Respirable dust.
		10 mg/m <sup>3</sup>	Total dust.
m-Cresol (CAS 108-39-4)	Ceiling	40 mg/m <sup>3</sup>	
	TWA	20 mg/m <sup>3</sup>	
p-Cresol (CAS 106-44-5)	Ceiling	40 mg/m <sup>3</sup>	
	TWA	20 mg/m <sup>3</sup>	
Phenol (CAS 108-95-2)	Ceiling	15 mg/m <sup>3</sup>	
	TWA	7,5 mg/m <sup>3</sup>	
Phenol, polymer with formaldehyde (CAS 9003-35-4)	TWA	5 mg/m <sup>3</sup>	Dust.
Quartz (CAS 14808-60-7)	TWA	0,1 mg/m <sup>3</sup>	Respirable dust.

**Denmark. Exposure Limit Values**

Components	Type	Value	Form
Ethanol (CAS 64-17-5)	TLV	1900 mg/m <sup>3</sup> 1000 ppm	

**Denmark. Exposure Limit Values**

Components	Type	Value	Form
Formaldehyde (CAS 50-00-0)	TWA	0,4 mg/m <sup>3</sup>	
		0,3 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	
Phenol (CAS 108-95-2)	TLV	4 mg/m <sup>3</sup>	
		1 ppm	
Quartz (CAS 14808-60-7)	TLV	0,3 mg/m <sup>3</sup>	Total
		0,1 mg/m <sup>3</sup>	Respirable.
Refractories, Fibers, Aluminosilicate (CAS 142844-00-6)	TLV	1 fibers/cm <sup>3</sup>	Fiber.

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

Components	Type	Value	Form
Ethanol (CAS 64-17-5)	STEL	1900 mg/m <sup>3</sup>	
		1000 ppm	
	TWA	1000 mg/m <sup>3</sup>	
		500 ppm	
Formaldehyde (CAS 50-00-0)	TWA	0,6 mg/m <sup>3</sup>	
		0,5 ppm	
Graphite (CAS 7782-42-5)	TWA	5 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	
Phenol (CAS 108-95-2)	STEL	16 mg/m <sup>3</sup>	
		4 ppm	
	TWA	7,8 mg/m <sup>3</sup>	
		2 ppm	
Quartz (CAS 14808-60-7)	TWA	0,1 mg/m <sup>3</sup>	Respirable dust.

**Finland. Workplace Exposure Limits**

Components	Type	Value	Form
Ethanol (CAS 64-17-5)	STEL	2500 mg/m <sup>3</sup>	
		1300 ppm	
Formaldehyde (CAS 50-00-0)	TWA	1900 mg/m <sup>3</sup>	
		1000 ppm	
	Ceiling	1,2 mg/m <sup>3</sup>	
		1 ppm	
Graphite (CAS 7782-42-5)	TWA	0,37 mg/m <sup>3</sup>	
m-Cresol (CAS 108-39-4)		0,3 ppm	
	TWA	2 mg/m <sup>3</sup>	
	STEL	45 mg/m <sup>3</sup>	
p-Cresol (CAS 106-44-5)		10 ppm	
	TWA	22 mg/m <sup>3</sup>	
		5 ppm	
	STEL	45 mg/m <sup>3</sup>	
Phenol (CAS 108-95-2)		10 ppm	
	TWA	22 mg/m <sup>3</sup>	
		5 ppm	
	STEL	20 mg/m <sup>3</sup>	
Quartz (CAS 14808-60-7)		5 ppm	
	TWA	8 mg/m <sup>3</sup>	
		2 ppm	
	TWA	0,2 mg/m <sup>3</sup>	Respirable.

**Finland. Workplace Exposure Limits**

Components	Type	Value	Form
Refractories, Fibers, Aluminosilicate (CAS 142844-00-6)	TWA	0,2 fibers/cm3	Respirable.

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

Components	Type	Value	Form
Ethanol (CAS 64-17-5)	VLE	9500 mg/m3 5000 ppm	
	VME	1900 mg/m3 1000 ppm	
Formaldehyde (CAS 50-00-0)	VLE	1 ppm	
	VME	0,5 ppm	
Graphite (CAS 7782-42-5)	VME	2 mg/m3	Respirable fraction.
	VME	22 mg/m3	
m-Cresol (CAS 108-39-4)	VME	5 ppm	
		22 mg/m3	
p-Cresol (CAS 106-44-5)	VME	5 ppm	
		22 mg/m3	
Phenol (CAS 108-95-2)	VME	7,8 mg/m3	
		2 ppm	
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	Form
Ethanol (CAS 64-17-5)	TWA	960 mg/m3	
		500 ppm	
Formaldehyde (CAS 50-00-0)	TWA	0,37 mg/m3	
		0,3 ppm	
Graphite (CAS 7782-42-5)	TWA	4 mg/m3	Inhalable fraction.
		1,5 mg/m3	Respirable fraction.

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

Components	Type	Value	Form
Ethanol (CAS 64-17-5)	AGW	960 mg/m3	
		500 ppm	
Graphite (CAS 7782-42-5)	AGW	3 mg/m3	Respirable fraction.
		10 mg/m3	Inhalable fraction.
Phenol (CAS 108-95-2)	AGW	8 mg/m3	
		2 ppm	

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

Components	Type	Value	Form
Ethanol (CAS 64-17-5)	TWA	1900 mg/m3	
		1000 ppm	
Formaldehyde (CAS 50-00-0)	STEL	2,5 mg/m3	
		2 ppm	
	TWA	2,5 mg/m3	
		2 ppm	
Graphite (CAS 7782-42-5)	TWA	5 mg/m3	Respirable.
		10 mg/m3	Inhalable
m-Cresol (CAS 108-39-4)	TWA	22 mg/m3	
		5 ppm	
p-Cresol (CAS 106-44-5)	TWA	22 mg/m3	
		5 ppm	
Phenol (CAS 108-95-2)	STEL	38 mg/m3	
		10 ppm	
	TWA	19 mg/m3	
		5 ppm	

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

Components	Type	Value	Form
Ethanol (CAS 64-17-5)	STEL	7600 mg/m3	
	TWA	1900 mg/m3	
Formaldehyde (CAS 50-00-0)	STEL	0,6 mg/m3	
	TWA	0,6 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	
Phenol (CAS 108-95-2)	STEL	7,8 mg/m3	
	TWA	7,8 mg/m3	
Quartz (CAS 14808-60-7)	TWA	0,15 mg/m3	Respirable.

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

Components	Type	Value	Form
Ethanol (CAS 64-17-5)	TWA	1900 mg/m3 1000 ppm	
Formaldehyde (CAS 50-00-0)	STEL	1,2 mg/m3	
	TWA	1 ppm 0,4 mg/m3	
Graphite (CAS 7782-42-5)	TWA	0,3 ppm 5 mg/m3	Total dust. Respirable dust.
	TWA	2,5 mg/m3	
m-Cresol (CAS 108-39-4)	TWA	22 mg/m3	
p-Cresol (CAS 106-44-5)	TWA	5 ppm 22 mg/m3	
Phenol (CAS 108-95-2)	TWA	5 ppm 4 mg/m3	
Quartz (CAS 14808-60-7)	TWA	1 ppm 0,3 mg/m3	Total dust.
	TWA	0,1 mg/m3	Respirable dust.
Refractories, Fibers, Aluminosilicate (CAS 142844-00-6)	TWA	1 fibers/cm3	Fiber.

### Ireland. Occupational Exposure Limits

Components	Type	Value	Form
Ethanol (CAS 64-17-5)	STEL	1000 ppm	
Formaldehyde (CAS 50-00-0)	STEL	2,5 mg/m3	
	TWA	2 ppm 2,5 mg/m3	
Graphite (CAS 7782-42-5)	TWA	2 ppm 4 mg/m3	Respirable dust.
	TWA	10 mg/m3	Total inhalable dust.
m-Cresol (CAS 108-39-4)	TWA	22 mg/m3	
p-Cresol (CAS 106-44-5)	TWA	5 ppm 22 mg/m3	
Phenol (CAS 108-95-2)	STEL	5 ppm 16 mg/m3	
	TWA	4 ppm 8 mg/m3	
Quartz (CAS 14808-60-7)	TWA	2 ppm 0,1 mg/m3	Respirable dust.

### Italy. OELs

Components	Type	Value	Form
Ethanol (CAS 64-17-5)	STEL	1000 ppm	
Formaldehyde (CAS 50-00-0)	Ceiling	0,3 ppm	
Graphite (CAS 7782-42-5)	TWA	2 mg/m3	Respirable fraction.



**Italy. OELs**

Components	Type	Value	Form
m-Cresol (CAS 108-39-4)	TWA	22 mg/m3 5 ppm	
p-Cresol (CAS 106-44-5)	TWA	22 mg/m3 5 ppm	
Phenol (CAS 108-95-2)	TWA	7,8 mg/m3 2 ppm	
Quartz (CAS 14808-60-7)	TWA	0,025 mg/m3	Respirable fraction.
Refractories, Fibers, Aluminosilicate (CAS 142844-00-6)	TWA	0,2 fibers/cm3	Fiber.

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

Components	Type	Value	Form
2,6-Xylenol (CAS 576-26-1)	TWA	2 mg/m3	
Ethanol (CAS 64-17-5)	TWA	1000 mg/m3	
Formaldehyde (CAS 50-00-0)	TWA	0,5 mg/m3	
Graphite (CAS 7782-42-5)	TWA	2 mg/m3	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	
Phenol (CAS 108-95-2)	STEL	16 mg/m3 4 ppm	
	TWA	8 mg/m3 2 ppm	
Refractories, Fibers, Aluminosilicate (CAS 142844-00-6)	TWA	2 mg/m3	

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

Components	Type	Value	Form
Ethanol (CAS 64-17-5)	Ceiling	1900 mg/m3 1000 ppm	
	STEL	1900 mg/m3 1000 ppm	
	TWA	1000 mg/m3 500 ppm	
Formaldehyde (CAS 50-00-0)	Ceiling	1 mg/m3	
	TWA	1,2 ppm 0,6 mg/m3 0,5 ppm	
Graphite (CAS 7782-42-5)	TWA	3 mg/m3	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	
Phenol (CAS 108-95-2)	STEL	15,6 mg/m3 4 ppm	
	TWA	7,8 mg/m3 2 ppm	
Phenol, polymer with formaldehyde (CAS 9003-35-4)	TWA	3 mg/m3	Dust.
Quartz (CAS 14808-60-7)	TWA	0,1 mg/m3	Respirable fraction.

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

Components	Type	Value
m-Cresol (CAS 108-39-4)	TWA	22 mg/m3 5 ppm
p-Cresol (CAS 106-44-5)	TWA	22 mg/m3 5 ppm

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

Components	Type	Value
Phenol (CAS 108-95-2)	STEL	16 mg/m <sup>3</sup>
		4 ppm
	TWA	8 mg/m <sup>3</sup>
		2 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
Phenol (CAS 108-95-2)	TWA	7,8 mg/m <sup>3</sup>
		2 ppm

**Netherlands. OELs (binding)**

Components	Type	Value	Form
Ethanol (CAS 64-17-5)	STEL	1900 mg/m <sup>3</sup>	
	TWA	260 mg/m <sup>3</sup>	
Formaldehyde (CAS 50-00-0)	STEL	0,5 mg/m <sup>3</sup>	
	TWA	0,15 mg/m <sup>3</sup>	
Phenol (CAS 108-95-2)	TWA	8 mg/m <sup>3</sup>	
Quartz (CAS 14808-60-7)	TWA	0,075 mg/m <sup>3</sup>	Respirable dust.
Refractories, Fibers, Aluminosilicate (CAS 142844-00-6)	TWA	0,5 fibers/cc	Respirable fibers.

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

Components	Type	Value	Form
Ethanol (CAS 64-17-5)	TLV	950 mg/m <sup>3</sup>	
		500 ppm	
Formaldehyde (CAS 50-00-0)	Ceiling	1,2 mg/m <sup>3</sup>	
		1 ppm	
		0,6 mg/m <sup>3</sup>	
Graphite (CAS 7782-42-5)	TLV	0,5 ppm	
		2 mg/m <sup>3</sup>	Respirable dust.
		10 mg/m <sup>3</sup>	Total dust.
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	
Phenol (CAS 108-95-2)	STEL	12 mg/m <sup>3</sup>	
		3 ppm	
		4 mg/m <sup>3</sup>	
Quartz (CAS 14808-60-7)	TLV	1 ppm	
		0,3 mg/m <sup>3</sup>	Total dust.
		0,1 mg/m <sup>3</sup>	Respirable dust.
Refractories, Fibers, Aluminosilicate (CAS 142844-00-6)	TLV	0,1 fibers/cm <sup>3</sup>	Fiber.

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

Components	Type	Value	Form
Ethanol (CAS 64-17-5)	TWA	1900 mg/m <sup>3</sup>	
Formaldehyde (CAS 50-00-0)	STEL	1 mg/m <sup>3</sup>	
		0,5 mg/m <sup>3</sup>	
Graphite (CAS 7782-42-5)	TWA	4 mg/m <sup>3</sup>	Total dust.
		1 mg/m <sup>3</sup>	Respirable dust.
m-Cresol (CAS 108-39-4)	TWA	22 mg/m <sup>3</sup>	

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

Components	Type	Value	Form
p-Cresol (CAS 106-44-5)	TWA	22 mg/m <sup>3</sup>	
Phenol (CAS 108-95-2)	STEL	16 mg/m <sup>3</sup>	
	TWA	7,8 mg/m <sup>3</sup>	
Quartz (CAS 14808-60-7)	TWA	2 mg/m <sup>3</sup>	Total dust.
		0,3 mg/m <sup>3</sup>	Respirable dust.

**Portugal. OELs. Decree-Law n. 290/2001 (Journal of the Republic - 1 Series A, n.266)**

Components	Type	Value
Phenol (CAS 108-95-2)	TWA	7,8 mg/m <sup>3</sup> 2 ppm

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

Components	Type	Value	Form
Ethanol (CAS 64-17-5)	TWA	1000 ppm	
Formaldehyde (CAS 50-00-0)	Ceiling	0,3 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	
Quartz (CAS 14808-60-7)	TWA	0,05 mg/m <sup>3</sup>	Respirable fraction.

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

Components	Type	Value
2,6-Xylenol (CAS 576-26-1)	STEL	20 mg/m <sup>3</sup>
	TWA	15 mg/m <sup>3</sup>
Ethanol (CAS 64-17-5)	STEL	9500 mg/m <sup>3</sup> 5000 ppm
	TWA	1900 mg/m <sup>3</sup> 1000 ppm
Formaldehyde (CAS 50-00-0)	STEL	3 mg/m <sup>3</sup>
	TWA	2 ppm 1,2 mg/m <sup>3</sup> 1 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
Phenol (CAS 108-95-2)	TWA	7,8 mg/m <sup>3</sup> 2 ppm

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

Components	Type	Value	Form
Ethanol (CAS 64-17-5)	Ceiling	1920 mg/m <sup>3</sup>	
	TWA	960 mg/m <sup>3</sup> 500 ppm	
Formaldehyde (CAS 50-00-0)	Ceiling	0,74 mg/m <sup>3</sup>	
	TWA	0,37 mg/m <sup>3</sup> 0,3 ppm	
Graphite (CAS 7782-42-5)	TWA	2 mg/m <sup>3</sup>	Respirable fraction.
m-Cresol (CAS 108-39-4)	TWA	10 mg/m <sup>3</sup> 22 mg/m <sup>3</sup> 5 ppm	Total
p-Cresol (CAS 106-44-5)	TWA	22 mg/m <sup>3</sup> 5 ppm	
Phenol (CAS 108-95-2)	TWA	7,8 mg/m <sup>3</sup> 2 ppm	
Quartz (CAS 14808-60-7)	TWA	0,1 mg/m <sup>3</sup>	

**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
Ethanol (CAS 64-17-5)	TWA	1900 mg/m <sup>3</sup> 1000 ppm	
Formaldehyde (CAS 50-00-0)	TWA	0,62 mg/m <sup>3</sup> 0,5 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	
Phenol (CAS 108-95-2)	TWA	8 mg/m <sup>3</sup> 2 ppm	
Quartz (CAS 14808-60-7)	TWA	0,15 mg/m <sup>3</sup>	Respirable fraction.

**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
Ethanol (CAS 64-17-5)	TWA	1910 mg/m <sup>3</sup> 1000 ppm	
Formaldehyde (CAS 50-00-0)	STEL	0,37 mg/m <sup>3</sup> 0,3 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	
Phenol (CAS 108-95-2)	TWA	8 mg/m <sup>3</sup> 2 ppm	
Quartz (CAS 14808-60-7)	TWA	0,1 mg/m <sup>3</sup>	Respirable fraction.

**Sweden. Occupational Exposure Limit Values**

Components	Type	Value	Form
Ethanol (CAS 64-17-5)	STEL	1900 mg/m <sup>3</sup> 1000 ppm	
	TWA	1000 mg/m <sup>3</sup> 500 ppm	
	Ceiling	1,2 mg/m <sup>3</sup>	
Formaldehyde (CAS 50-00-0)	TWA	1 ppm 0,6 mg/m <sup>3</sup>	
	TWA	0,5 ppm	
Graphite (CAS 7782-42-5)	TWA	5 mg/m <sup>3</sup>	Total dust.
m-Cresol (CAS 108-39-4)	STEL	9 mg/m <sup>3</sup> 2 ppm	
	TWA	4,5 mg/m <sup>3</sup> 1 ppm	
p-Cresol (CAS 106-44-5)	STEL	9 mg/m <sup>3</sup> 2 ppm	
	TWA	4,5 mg/m <sup>3</sup> 1 ppm	
Phenol (CAS 108-95-2)	STEL	8 mg/m <sup>3</sup> 2 ppm	
	TWA	4 mg/m <sup>3</sup> 1 ppm	
Quartz (CAS 14808-60-7)	TWA	0,1 mg/m <sup>3</sup>	Respirable dust.

**Switzerland. SUVA Grenzwerte am Arbeitsplatz**

Components	Type	Value	Form
Ethanol (CAS 64-17-5)	STEL	1920 mg/m <sup>3</sup>	

**Switzerland. SUVA Grenzwerte am Arbeitsplatz**

Components	Type	Value	Form
Formaldehyde (CAS 50-00-0)	TWA	1000 ppm 960 mg/m <sup>3</sup> 500 ppm	
	STEL	0,74 mg/m <sup>3</sup>	
	TWA	0,6 ppm 0,37 mg/m <sup>3</sup> 0,3 ppm	
Graphite (CAS 7782-42-5)	TWA	5 mg/m <sup>3</sup> 2,5 mg/m <sup>3</sup>	Inhalable dust. Respirable dust.
m-Cresol (CAS 108-39-4)	STEL	22 mg/m <sup>3</sup>	
p-Cresol (CAS 106-44-5)	TWA	5 ppm 22 mg/m <sup>3</sup>	
	STEL	5 ppm 22 mg/m <sup>3</sup>	
Phenol (CAS 108-95-2)	TWA	5 ppm 22 mg/m <sup>3</sup>	
	STEL	5 ppm 19 mg/m <sup>3</sup>	
Quartz (CAS 14808-60-7)	TWA	5 ppm 19 mg/m <sup>3</sup> 5 ppm	
	TWA	0,15 mg/m <sup>3</sup>	Respirable dust.

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

Components	Type	Value	Form
Ethanol (CAS 64-17-5)	TWA	1920 mg/m <sup>3</sup> 1000 ppm	
Formaldehyde (CAS 50-00-0)	STEL	2,5 mg/m <sup>3</sup>	
	TWA	2 ppm 2,5 mg/m <sup>3</sup>	
Phenol (CAS 108-95-2)	STEL	2 ppm 16 mg/m <sup>3</sup>	
	TWA	4 ppm 7,8 mg/m <sup>3</sup>	
Quartz (CAS 14808-60-7)	TWA	2 ppm 0,1 mg/m <sup>3</sup>	Respirable.

**United Kingdom**

Components	Type	Value	Form
Graphite (CAS 7782-42-5)	TWA	4 mg/m <sup>3</sup> 10 mg/m <sup>3</sup>	Respirable dust. 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
	TWA	22 mg/m <sup>3</sup> 5 ppm
Phenol (CAS 108-95-2)	STEL	16 mg/m <sup>3</sup> 4 ppm
	TWA	8 mg/m <sup>3</sup> 2 ppm

**Biological limit values****Finland. HTP-arvot, App 2., Biological Limit Values, (BRA/BGV) , Social Affairs and Ministry of Health**

Components	Value	Determinant	Specimen	Sampling time
Phenol (CAS 108-95-2)	1,3 mmol/l	Total phenol	Urine	*

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

**France. Biological indicators of exposure (IBE) (National Institute for Research and Security (INRS, ND 2065))**

Components	Value	Determinant	Specimen	Sampling time
Phenol (CAS 108-95-2)	250 mg/g	Phenol total	Creatinine in urine	*

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

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

Components	Value	Determinant	Specimen	Sampling time
Phenol (CAS 108-95-2)	300 mg/l	Phenol	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	*
Formaldehyde (CAS 50-00-0)	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	*
Phenol (CAS 108-95-2)	300 mg/g	Phenol	Creatinine in 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
Phenol (CAS 108-95-2)	250 mg/g	Creatinine in 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
2,6-Xylenol (CAS 576-26-1)	Workers	Dermal	0,67 mg/kg/day	Long term Systemic effects
		Inhalation	16 mg/m3	Acute Local effects
		Inhalation	1,675 mg/m3	Long term Systemic effects
Ethanol (CAS 64-17-5)	Workers	Dermal	343 mg/kg/day	Long term Systemic effects
		Inhalation	950 mg/m3	Long term Systemic effects
		Inhalation	1900 mg/m3	Acute Local effects
Formaldehyde (CAS 50-00-0)	Workers	Dermal	240 mg/kg/day	Long term Systemic effects

Components	Type	Route	Value	Form
Graphite (CAS 7782-42-5)	Workers	Inhalation	9 mg/m3	Long term Systemic effects
		Inhalation	1 mg/m3	Acute Local effects
		Inhalation	0,5 mg/m3	Long term Local effects
		Inhalation	1,2 mg/m3	Long term exposure local effects
m-Cresol (CAS 108-39-4)	Workers	Inhalation	343 mg/m3	Acute Systemic effects
		Inhalation	3,5 mg/m3	Long term Systemic effects
p-Cresol (CAS 106-44-5)	Workers	Inhalation	0,9 mg/m3	Acute Local effects
		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
Phenol (CAS 108-95-2)	Workers	Inhalation	0,9 mg/m3	Acute Local effects
		Inhalation	0,9 mg/m3	Long term exposure local effects
		Inhalation	343 mg/m3	Acute exposure systemic effect
		Inhalation	3,5 mg/m3	Long term exposure systemic effects
		Inhalation	0,9 mg/m3	Acute exposure local effects
		Inhalation	0,9 mg/m3	Long term exposure local effects

**Predicted no effect concentrations (PNECs)**

Components	Type	Route	Value	Form
2,6-Xylenol (CAS 576-26-1)	Aqua (freshwater)	Water	0,0108 mg/l	(freshwater)
	Aqua (intermittent releases)	Water	0,11 mg/l	(intermittant release)
	Sediment (marine water)	Water	0,0216 mg/kg	
Ethanol (CAS 64-17-5)	Soil	Soil	0,0371 mg/kg	soil dw
	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	
Formaldehyde (CAS 50-00-0)	Soil	Not applicable	0,63 mg/kg	
	Aqua (freshwater)	Not applicable	0,47 mg/l	
	Aqua (intermittent releases)	Not applicable	4,7 mg/l	
	Aqua (marine water)	Not applicable	0,47 mg/l	
	Sediment (freshwater)	Not applicable	2,44 mg/kg	
	Sediment (marine water)	Not applicable	2,44 mg/kg	
	Sewage Treatment Plant	Not applicable	0,19 mg/l	
m-Cresol (CAS 108-39-4)	Soil	Not applicable	0,21 mg/kg	
	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	

Components	Type	Route	Value	Form
Phenol (CAS 108-95-2)	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	
	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		

## 8.2. Exposure controls

**Appropriate engineering controls** Provide adequate ventilation. Observe Occupational Exposure Limits and minimise the risk of inhalation of vapours.

### 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 approved safety goggles.

#### Skin protection

**- Hand protection** Wear protective gloves. Chemical resistant gloves are recommended. Suitable gloves can be recommended by the glove supplier.

**- Other** Wear appropriate chemical resistant clothing to prevent any possibility of skin contact.

**Respiratory protection** In case of inadequate ventilation or risk of inhalation of vapours, use suitable 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. Private clothes and working clothes should be kept separately.

**Environmental exposure controls** Environmental manager must be informed of all major releases.

## SECTION 9: Physical and chemical properties

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

**Appearance** Black pliable semi-solid with phenolic odor.

**Physical state** Solid.

**Form** Pliable semi-solid.

**Colour** Black. **Odour**

Phenolic.

**Odour threshold** Not available.

**pH** Not applicable.

**Melting point/freezing point** Not available.

**Initial boiling point and boiling range** Not available.

**Flash point** 71,1 °C (160 °F)

**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.



<b>Vapour density</b>	Not applicable. <b>Relative</b>
<b>density</b>	Not available.
<b>Solubility(ies)</b>	Slightly soluble in water.
<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>	Avoid heat, sparks, open flames and other ignition sources.
<b>10.5. Incompatible materials</b>	Strong acids. Strong bases. Strong oxidising substances.
<b>10.6. Hazardous decomposition products</b>	Thermal decomposition or combustion may liberate carbon oxides and other toxic gases or vapours.

## SECTION 11: Toxicological information

**General information** Occupational exposure to the substance or mixture may cause adverse effects.

### Information on likely routes of exposure

<b>Ingestion</b>	Harmful if swallowed. Ingestion may cause irritation and malaise.
<b>Inhalation</b>	Vapours may irritate throat and respiratory system and cause coughing. Dust irritates the respiratory system, and may cause coughing and difficulties in breathing. Harmful: danger of serious damage to health by prolonged exposure through inhalation. May cause cancer by inhalation.
<b>Skin contact</b>	Causes skin irritation. Harmful in contact with skin. May cause sensitisation by skin contact.
<b>Eye contact</b>	Causes serious eye irritation.

**Symptoms** Irritation. May cause redness and pain. Headaches, dizziness, fatigue, nausea and vomiting. Coughing. Difficulty in breathing. Shortness of breath. Sensitisation.

### 11.1. Information on toxicological effects

**Acute toxicity** Harmful by inhalation, in contact with skin and if swallowed. Causes serious eye irritation. Causes skin irritation. Dust irritates the respiratory system, and may cause coughing and difficulties in breathing. Overexposure to mists/vapors of this product may cause headache, dizziness, nausea, and respiratory tract irritation.

Components	Species	Test results
Formaldehyde (CAS 50-00-0)		
<b>Acute</b>		
<i>Inhalation</i>		
LC50	Rat	0,48 mg/l, 4 Hours
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

Components	Species	Test results
Phenol (CAS 108-95-2)		
<b>Acute</b>		
<i>Dermal</i>		
LD50	Rabbit	850 mg/kg
<i>Oral</i>		
LD50	Rat	530 mg/kg
<b>Skin corrosion/irritation</b>	Causes skin irritation.	
<b>Serious eye damage/irritation</b>	Causes serious eye irritation.	
<b>Respiratory sensitisation</b>	Not classified.	
<b>Skin sensitisation</b>	May cause sensitisation by skin contact.	
<b>Germ cell mutagenicity</b>	Phenol: Suspected of causing genetic defects.	
<b>Carcinogenicity</b>	May cause cancer.	
<b>IARC Monographs. Overall Evaluation of Carcinogenicity</b>		
Formaldehyde (CAS 50-00-0)		1 Carcinogenic to humans.
Phenol (CAS 108-95-2)		3 Not classifiable as to carcinogenicity to humans.
Quartz (CAS 14808-60-7)		1 Carcinogenic to humans.
Refractories, Fibers, Aluminosilicate (CAS 142844-00-6)		2B Possibly carcinogenic to humans.
<b>Reproductive toxicity</b>	Not classified.	
<b>Specific target organ toxicity - single exposure</b>	Not classified.	
<b>Specific target organ toxicity - repeated exposure</b>	Causes damage to organs through prolonged or repeated exposure.	
<b>Aspiration hazard</b>	Not classified.	
<b>Mixture versus substance information</b>	No data available.	
<b>Other information</b>	Inhalation of high concentrations of quartz dust can lead to the lung disease known as silicosis, with cough and shortness of breath.	

## SECTION 12: Ecological information

**12.1. Toxicity** 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.

Components	Species	Test results
Formaldehyde (CAS 50-00-0)		
<b>Aquatic</b>		
Crustacea	EC50	Water flea ( <i>Daphnia pulex</i> ) 4,3 - 7,8 mg/l, 48 hours
Fish	LC50	American eel ( <i>Anguilla rostrata</i> ) 0 - 197,79 mg/l, 96 hours
m-Cresol (CAS 108-39-4)		
<b>Aquatic</b>		
Crustacea	EC50	Scud ( <i>Gammarus fasciatus</i> ) 7 mg/l, 48 hours
Fish	LC50	Rainbow trout, donaldson trout ( <i>Oncorhynchus mykiss</i> ) 8,9 mg/l, 96 hours
p-Cresol (CAS 106-44-5)		
<b>Aquatic</b>		
Crustacea	EC50	Water flea ( <i>Daphnia magna</i> ) 7,7 mg/l, 48 hours
Fish	LC50	Fish ( <i>Lepidocephalichthyes guntea</i> ) 6,15 - 7,96 mg/l, 96 hours
<b>12.2. Persistence and degradability</b>	No data available.	
<b>12.3. Bioaccumulative potential</b>	Not expected to bioaccumulate on the basis of the low octanol-water partition coefficient.	
<b>Partition coefficient n-octanol/water (log Kow)</b>		
Formaldehyde		0,35
Phenol		1,46
p-Cresol		1,94
m-Cresol		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>	An environmental hazard cannot be excluded in the event of unprofessional handling or disposal.

## SECTION 13: Disposal considerations

### 13.1. Waste treatment methods

<b>Residual waste</b>	Dispose of waste and residues in accordance with local authority requirements.
<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>	Dispose in accordance with all applicable regulations.

## 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**

Refractories, Fibers, Aluminosilicate (CAS 142844-00-6)

#### 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**

Refractories, Fibers, Aluminosilicate (CAS 142844-00-6)

**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**

Formaldehyde (CAS 50-00-0)

**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**

Formaldehyde (CAS 50-00-0)

m-Cresol (CAS 108-39-4)

p-Cresol (CAS 106-44-5)

Phenol (CAS 108-95-2)

Refractories, Fibers, Aluminosilicate (CAS 142844-00-6)

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

Formaldehyde (CAS 50-00-0)

m-Cresol (CAS 108-39-4)

p-Cresol (CAS 106-44-5)

Phenol (CAS 108-95-2)

Refractories, Fibers, Aluminosilicate (CAS 142844-00-6)

**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 allowed to work with this product according to 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.  
Not available.

**References**

**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**

R20/21/22 Harmful by inhalation, 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.  
R40 Limited evidence of a carcinogenic effect.  
R43 May cause sensitisation by skin contact.  
R48/20 Harmful: danger of serious damage to health by prolonged exposure through inhalation.  
R48/20/21/22 Harmful: danger of serious damage to health by prolonged exposure through inhalation, in contact with skin and if swallowed.  
R49 May cause cancer by inhalation.  
R51/53 Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.  
R68 Possible risk of irreversible effects.  
H301 - Toxic if swallowed.  
H302 - Harmful if swallowed. H311 - Toxic in contact with skin. H312 - Harmful 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.  
H332 - Harmful if inhaled.  
H335 - May cause respiratory irritation.  
H341 - Suspected of causing genetic defects.  
H350 - May cause cancer.

H351 - Suspected of causing cancer.  
H372 - Causes damage to organs through prolonged or repeated exposure.  
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.