

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

L-200 Nuclear Grade

Registration number

Synonyms None. **Product code** 905-0020

Issue date 15-November-2012

Version number

Revision date 15-November-2012 Supersedes date 13-January-2012

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

Company name Team Industrial Services, Inc.

Postbus 37 4380 AA Vlissingen 3237 **Address**

The Netherlands

Telephone +31 (0) 118 48 58 00

Fax +31 (0) 118 48 58 86

Not available. e-mail **Contact person** Not available. +1 703-527-3887 1.4. Emergency telephone

number

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 R10, Muta. Cat. 3;R68, T;R24/25, C;R34, Xn;R20

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

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

Physical hazards

Flammable liquids H226 - Flammable liquid and Category 3

vapour.

Health hazards

Acute toxicity, oral Category 4 H302 - Harmful if swallowed.

Skin corrosion/irritation H314 - Causes severe skin burns Category 1B

and eye damage.

Germ cell mutagenicity Category 2 H341 - Suspected of causing

genetic defects.

Hazard summary

Physical hazards Flammable

Health hazards Harmful by inhalation. Toxic in contact with skin and if swallowed. Causes burns. Possible risk of

irreversible effects. Occupational exposure to the substance or mixture may cause adverse health

effects.

Environmental hazards Not classified for hazards to the environment.

Specific hazards May cause blood damage. May cause lung oedema. May cause damage to the liver and kidneys.

High concentrations may lead to central nervous system effects (drowsiness, dizziness, nausea,

headaches, paralysis and loss of consciousness).

L-200 Nuclear Grade 1 / 21 Main symptoms

Unconsciousness. Coughing. Shortness of breath. Discomfort in the chest. Irritation of nose and throat. 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: Phenol, m-Cresol, p-Cresol

Hazard pictograms



Signal word Danger

Hazard statements H226 - Flammable liquid and vapour.

H302 - Harmful if swallowed.

H314 - Causes severe skin burns and eye damage. H341 - Suspected of causing genetic defects.

Precautionary statements

Prevention P210 - Keep away from heat/sparks/open flames/hot surfaces. - No smoking.

P260 - Do not breathe fume/gas/mist/vapours/spray.

P280 - Wear protective gloves/protective clothing/eye protection/face protection.

Response P303 + P361 + P353 - IF ON SKIN (or hair): Remove/Take off immediately all contaminated

clothing. Rinse skin with water/shower.

P305 + P351 + P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove

contact lenses, if present and easy to do. Continue rinsing. P310 - Immediately call a POISON CENTRE or doctor/physician.

Storage P403 + P235 - Store in a well-ventilated place. Keep cool.

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

regulations.

Supplemental label information Contains Hexamethylenetetramine. May produce an allergic reaction.

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

SECTION 3: Composition/information on ingredients

DSD: -CLP: -

3.2. Mixtures

General information

Chemical name		%	CAS-No. / EC No.	REACH Registration No.	INDEX No.	Notes
Phenol, polymer with for	ormaldehy	/de 50 - 70	9003-35-4 500-005-2	-	-	
Classification:	DSD:	-				
	CLP:	-				
m-Cresol		5 - < 10	108-39-4 203-577-9	-	604-004-00-9	#
Classification:	DSD:	T;R24/25, C;R3	4			
	CLP:	Acute Tox. 3;H3	301, Acute Tox. 3;H3	11, Skin Corr. 1B;H314		
Phenol		3 - < 5	108-95-2 203-632-7	-	604-001-00-2	#
Classification:	DSD:	Muta. Cat. 3;R6	8, T;R23/24/25, C;R3	34, Xn;R48/20/21/22		
	CLP:	Acute Tox. 3;H3 STOT RE 2;H3		11, Skin Corr. 1B;H314, Acu	ite Tox. 3;H331, N	/luta. 2;H341,
Water		1 - < 3	7732-18-5 231-791-2	-	-	

L-200 Nuclear Grade 2 / 21

Classification:

Chemical name		%	CAS-No. / EC No.	REACH Registration N	o. INDEX No.	Notes
p-Cresol		1 - < 3	106-44-5 203-398-6	-	604-004-00-9	#
Classification:	DSD:	T;R24/25, C;R3	4			
	CLP:	Acute Tox. 3;H3	301, Acute Tox. 3;H3	11, Skin Corr. 1B;H314		
Hexamethylenetetramine		< 1	100-97-0 202-905-8	-	612-101-00-2	
Classification:	DSD:	F;R11, R43				
	CLP:	Flam. Sol. 2;H2	28, Skin Sens. 1;H31	7		
Ethylphenol		< 0,3	25429-37-2	-	-	
Classification:	DSD:	-				
	CLP:	-				
Xylenol		< 0,2	1300-71-6 215-089-3	-	604-006-00-X	
Classification:	DSD:	T;R24/25, C;R3	4, N;R51/53			
	CLP:	Acute Tox. 3;H3 Chronic 2;H411	301, Acute Tox. 3;H3	11, Skin Corr. 1B;H314, E	ye Dam. 1;H318, Aq	uatic
Formaldehyde		< 0,1	50-00-0 200-001-8	-	605-001-00-5	
Classification:	DSD:	Carc. Cat. 3;R4	0, T;R23/24/25, C;R3	34, R43		
	CLP:		301, Acute Tox. 3;H3 SE 3;H335, Carc. 2;H	11, Skin Corr. 1B;H314, S I351	skin Sens. 1;H317, A	cute Tox.
o-Cresol		< 0,1	95-48-7 202-423-8	-	604-004-00-9	#
Classification:	DSD:	T;R24/25, C;R3	4			
	CLP:	Acute Tox. 3;H3	301, Acute Tox. 3;H3	11, Skin Corr. 1B;H314		

^{#:} 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

Inhalation If breathing stops, provide artificial respiration. Get medical attention immediately.

Skin contact Immediately flush with plenty of water for at least 15 minutes while removing contaminated

clothing and shoes. Get medical attention immediately.

Eye contact 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. Remove contact lenses, if

present and easy to do. Continue rinsing.

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

Itching, redness, swelling, burning or blistering of skin. May cause permanent damage if eye is not immediately irrigated.

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.

L-200 Nuclear Grade 3 / 21

Version No.: 01

SECTION 5: Firefighting measures

General fire hazards The product is flammable.

5.1. Extinguishing media

Suitable extinguishing

media

Extinguish with alcohol-resistant foam, carbon dioxide or dry powder.

Unsuitable extinguishing

No restrictions known.

5.2. Special hazards arising from the substance or mixture

Solvent vapours may form explosive mixtures with air. During fire, gases hazardous to health may

be formed.

5.3. Advice for firefighters

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

the workplace.

Special fire fighting procedures

Ventilate closed spaces before entering them. Containers should be cooled with water to prevent vapor pressure build up. Prevent runoff from fire control or dilution from entering streams, sewers or drinking water supply. Evacuate area and fight fire from a safe distance. Stop leak if you can do so without risk. Move containers from fire area if you can do it without risk.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

For non-emergency personnel

Extinguish all ignition sources. Avoid sparks, flames, heat and smoking. Ventilate. Ventilate closed spaces before entering them. Avoid inhalation of vapours and contact with skin and eyes. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. For personal protection, see section 8.

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. Do not contaminate water. Environmental

manager must be informed of all major spillages.

6.3. Methods and material for containment and cleaning up Eliminate all ignition sources. Use a non-combustible material like vermiculite, sand or earth to soak up the product and place into a container for later disposal. Clean contaminated surface thoroughly. Sweep up or vacuum up spillage and collect in suitable container for disposal. Never return spills in original containers for re-use. This material and its container must be disposed of as hazardous waste. 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

Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Avoid any exposure. Avoid contact during pregnancy/while nursing. Use only with adequate ventilation. Avoid inhalation of vapours and contact with skin and eyes. The product is flammable, and heating may generate vapours which may form explosive vapour/air mixtures. Vapours are heavier than air and may travel along the floor and in the bottom of containers.

7.2. Conditions for safe storage, including any incompatibilities

Follow rules for flammable liquids. Keep away from heat, spark, open flames and other sources of ignition. Keep away from sources of ignition - No smoking. Store in a cool, dry, 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, OEL Ordinance (GwV), BGBI. II, no. 184/2001

Components	Туре	Value	
Ethanol (CAS 64-17-5)	Ceiling	3800 mg/m3	
		2000 ppm	
	MAK	1900 mg/m3	
		1000 ppm	
Formaldehyde (CAS 50-00-0)	Ceiling	0,6 mg/m3	
		0,5 ppm	
	MAK	0,6 mg/m3	
		0,5 ppm	
m-Cresol (CAS 108-39-4)	Ceiling	44 mg/m3	
		10 ppm	
	MAK	22 mg/m3	

L-200 Nuclear Grade 4/21

Version No.: 01

Components	Туре	Value	
		5 ppm	
p-Cresol (CAS 106-44-5)	Ceiling	44 mg/m3	
		10 ppm	
	MAK	22 mg/m3	
		5 ppm	
Phenol (CAS 108-95-2)	MAK	8 mg/m3	
		2 ppm	
	STEL	6 mg/m3	
		4 ppm	
Belgium. Exposure Limit Values.			
Components	Туре	Value	
Ethanol (CAS 64-17-5)	TWA	1907 mg/m3	
		1000 ppm	
Formaldehyde (CAS 50-00-0)	STEL	0,38 mg/m3	
·		0,3 ppm	
m-Cresol (CAS 108-39-4)	TWA	22 mg/m3	
		5 ppm	

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

TWA

STEL

TWA

Components	Туре	Value	
Ethanol (CAS 64-17-5)	TWA	1000 mg/m3	
Formaldehyde (CAS 50-00-0)	STEL	2 mg/m3	
	TWA	1 mg/m3	
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	
Phenol (CAS 108-95-2)	TWA	7,8 mg/m3	

22 mg/m3 5 ppm

16 mg/m3 4 ppm

8 mg/m3 2 ppm

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

Components	Туре	Value
Formaldehyde (CAS 50-00-0)	TWA	3 mg/m3
		2 ppm
Phenol (CAS 108-95-2)	TWA	19 mg/m3
		5 ppm

Czech Republic. OELs. Government Decree 361

p-Cresol (CAS 106-44-5)

Phenol (CAS 108-95-2)

Components	Туре	Value Form	
Ethanol (CAS 64-17-5)	Ceiling	3000 mg/m3	
	TWA	1000 mg/m3	
Formaldehyde (CAS 50-00-0)	Ceiling	1 mg/m3	
	TWA	0,5 mg/m3	
m-Cresol (CAS 108-39-4)	Ceiling	40 mg/m3	
	TWA	20 mg/m3	
p-Cresol (CAS 106-44-5)	Ceiling	40 mg/m3	
	TWA	20 mg/m3	
Phenol (CAS 108-95-2)	Ceiling	15 mg/m3	
	TWA	7,5 mg/m3	

Components	Туре	Value	Form
Phenol, polymer with formaldehyde (CAS 9003-35-4)	TWA	5 mg/m3	Dust.

Denmark. Exposure Limit Values

Components	Туре	Value	
Ethanol (CAS 64-17-5)	TLV	1900 mg/m3	
		1000 ppm	
Formaldehyde (CAS 50-00-0)	Ceiling	0,4 mg/m3	
		0,3 ppm	
m-Cresol (CAS 108-39-4)	TLV	22 mg/m3	
		5 ppm	
p-Cresol (CAS 106-44-5)	TLV	22 mg/m3	
		5 ppm	
Phenol (CAS 108-95-2)	TLV	4 mg/m3	
		1 ppm	

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

Components	Туре	Value	
Ethanol (CAS 64-17-5)	STEL	1900 mg/m3	
		1000 ppm	
	TWA	1000 mg/m3	
		500 ppm	
Formaldehyde (CAS 50-00-0)	TWA	0,6 mg/m3	
		0,5 ppm	
Hexamethylenetetramine (CAS 100-97-0)	STEL	5 mg/m3	
	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	
Phenol (CAS 108-95-2)	STEL	16 mg/m3	
		4 ppm	
	TWA	8 mg/m3	
		2 ppm	

Finland. Workplace Exposure Limits

Components	Туре	Value	
Ethanol (CAS 64-17-5)	STEL	2500 mg/m3	
		1300 ppm	
	TWA	1900 mg/m3	
		1000 ppm	
Formaldehyde (CAS 50-00-0)	Ceiling	1,2 mg/m3	
		1 ppm	
	TWA	0,37 mg/m3	
		0,3 ppm	
m-Cresol (CAS 108-39-4)	STEL	45 mg/m3	
		10 ppm	
	TWA	22 mg/m3	
		5 ppm	
p-Cresol (CAS 106-44-5)	STEL	45 mg/m3	
		10 ppm	
	TWA	22 mg/m3	
		5 ppm	
Phenol (CAS 108-95-2)	STEL	20 mg/m3	
		5 ppm	
	TWA	8 mg/m3	

L-200 Nuclear Grade

2 ppm

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

Components	Туре	Value	
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	
m-Cresol (CAS 108-39-4)	VME	22 mg/m3	
		5 ppm	
p-Cresol (CAS 106-44-5)	VME	22 mg/m3	
		5 ppm	
Phenol (CAS 108-95-2)	VLE	15,6 mg/m3	
		4 ppm	
	VME	7,8 mg/m3	
		2 ppm	

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

Components	Туре	Value
Ethanol (CAS 64-17-5)	TWA	960 mg/m3
		500 ppm
Formaldehyde (CAS 50-00-0)	TWA	0,37 mg/m3
		0,3 ppm

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

Components	Туре	Value	
Ethanol (CAS 64-17-5)	AGW	960 mg/m3	
		500 ppm	
Phenol (CAS 108-95-2)	AGW	8 mg/m3	
		2 ppm	

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

Components	Туре	Value	
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	
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	Туре	Value	
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	

7 / 21

L-200 Nuclear Grade

Version No.: 01

Hungary. OELs. Joint Decree on Chemical Safety of Workplaces

Components	Туре	Value	
	TWA	22 mg/m3	
p-Cresol (CAS 106-44-5)	STEL	22 mg/m3	
	TWA	22 mg/m3	
Phenol (CAS 108-95-2)	STEL	16 mg/m3	
	TWA	8 mg/m3	

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

Components	Туре	Value	
Ethanol (CAS 64-17-5)	TWA	1900 mg/m3	
		1000 ppm	
Formaldehyde (CAS 50-00-0)	STEL	1,2 mg/m3	
		1 ppm	
	TWA	0,4 mg/m3	
		0,3 ppm	
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	
Phenol (CAS 108-95-2)	TWA	4 mg/m3	
		1 ppm	

Ireland. Occupational Exposure Limits

Components	Туре	Value	
Ethanol (CAS 64-17-5)	STEL	1000 ppm	
Formaldehyde (CAS 50-00-0)	STEL	2,5 mg/m3	
		2 ppm	
	TWA	2,5 mg/m3	
		2 ppm	
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	

Italy. Occupational Exposure Limits

Components	Туре	Value	Form
Ethanol (CAS 64-17-5)	STEL	1000 ppm	
Formaldehyde (CAS 50-00-0)	Ceiling	0,3 ppm	
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.
Phenol (CAS 108-95-2)	TWA	7,8 mg/m3	•
		2 ppm	

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

Components	Туре	Value	
Ethanol (CAS 64-17-5)	TWA	1000 mg/m3	
Formaldehyde (CAS 50-00-0)	TWA	0,5 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	
Phenol (CAS 108-95-2)	STEL	16 mg/m3	

Components	Туре	Value	
		4 ppm	
	TWA	8 mg/m3	
		2 ppm	

Lithuania. OELs. Limit Values for Chemical Substances, General Requirements

Components	Туре	Value	Form
Ethanol (CAS 64-17-5)	STEL	1900 mg/m3	
		1000 ppm	
	TWA	1000 mg/m3	
		500 ppm	
Formaldehyde (CAS 50-00-0)	Ceiling	1 mg/m3	
		1,2 ppm	
	TWA	0,6 mg/m3	
		0,5 ppm	
Hexamethylenetetramine (CAS 100-97-0)	STEL	5 mg/m3	
	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	
Phenol (CAS 108-95-2)	STEL	16 mg/m3	
		4 ppm	
	TWA	8 mg/m3	
		2 ppm	
Phenol, polymer with formaldehyde (CAS 9003-35-4)	TWA	3 mg/m3	Dust.

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

Components	Туре	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	
Phenol (CAS 108-95-2)	STEL	16 mg/m3	
		4 ppm	
	TWA	8 mg/m3	
		2 nnm	

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

Components	Туре	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	
Phenol (CAS 108-95-2)	TWA	7,8 mg/m3	
		2 ppm	
Netherlands. OELs (binding)			

Components	Туре	Value	
Ethanol (CAS 64-17-5)	STEL	1900 mg/m3	
	TWA	260 mg/m3	
Formaldehyde (CAS 50-00-0)	STEL	0,5 mg/m3	
·	TWA	0,15 mg/m3	
Phenol (CAS 108-95-2)	TWA	8 mg/m3	

Norway. Administrative Norms for Contaminants in the Workplace

Components	Туре	Value	
Ethanol (CAS 64-17-5)	TLV	950 mg/m3	
		500 ppm	
Formaldehyde (CAS 50-00-0)	Ceiling	1,2 mg/m3	
		1 ppm	
	TLV	0,6 mg/m3	
		0,5 ppm	
Hexamethylenetetramine (CAS 100-97-0)	TLV	3 mg/m3	
m-Cresol (CAS 108-39-4)	TLV	22 mg/m3	
		5 ppm	
p-Cresol (CAS 106-44-5)	TLV	22 mg/m3	
		5 ppm	
Phenol (CAS 108-95-2)	STEL	12 mg/m3	
		3 ppm	
	TLV	4 mg/m3	
		1 ppm	

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

Components	Туре	Value	
Ethanol (CAS 64-17-5)	TWA	1900 mg/m3	
Formaldehyde (CAS 50-00-0)	STEL	1 mg/m3	
	TWA	0,5 mg/m3	
Hexamethylenetetramine (CAS 100-97-0)	TWA	4 mg/m3	
m-Cresol (CAS 108-39-4)	TWA	22 mg/m3	
p-Cresol (CAS 106-44-5)	TWA	22 mg/m3	
Phenol (CAS 108-95-2)	STEL	16 mg/m3	
	TWA	7,8 mg/m3	

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

Components	Туре	Value	
Phenol (CAS 108-95-2)	TWA	7,8 mg/m3	
		2 ppm	

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

Components	Туре	Value	
Ethanol (CAS 64-17-5)	TWA	1000 ppm	
Formaldehyde (CAS 50-00-0)	Ceiling	0,3 ppm	
m-Cresol (CAS 108-39-4)	TWA	5 ppm	
p-Cresol (CAS 106-44-5)	TWA	5 ppm	
Phenol (CAS 108-95-2)	TWA	5 ppm	

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

Components	Туре	Value	
Ethanol (CAS 64-17-5)	STEL	9500 mg/m3	
		5000 ppm	
	TWA	1900 mg/m3	
		1000 ppm	
Formaldehyde (CAS 50-00-0)	STEL	3 mg/m3	
		2 ppm	
	TWA	1,2 mg/m3	
		1 ppm	
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	

L-200 Nuclear Grade

Version No.: 01

Slovakia. OELs. Regulation No. 300/2007 concerning protection of health in work with chemical agents

Components	Туре	Value	
Ethanol (CAS 64-17-5)	TWA	960 mg/m3	
		500 ppm	
Formaldehyde (CAS 50-00-0)	TWA	0,37 mg/m3	
		0,3 ppm	
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	8 mg/m3	
		2 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	Туре	Value	
Ethanol (CAS 64-17-5)	TWA	1900 mg/m3	
		1000 ppm	
Formaldehyde (CAS 50-00-0)	TWA	0,62 mg/m3	
		0,5 ppm	
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	8 mg/m3	
		2 ppm	

Spain. Occupational Exposure Limits

Components	Туре	Value	
Ethanol (CAS 64-17-5)	TWA	1910 mg/m3	
		1000 ppm	
Formaldehyde (CAS 50-00-0)	STEL	0,37 mg/m3	
		0,3 ppm	
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	

Sweden. Occupational Exposure Limit Values

Components	Туре	Value	
Ethanol (CAS 64-17-5)	STEL	1900 mg/m3	
		1000 ppm	
	TWA	1000 mg/m3	
		500 ppm	
Formaldehyde (CAS 50-00-0)	Ceiling	0,74 mg/m3	
,		0,6 ppm	
	TWA	0,37 mg/m3	
		0,3 ppm	
Hexamethylenetetramine (CAS 100-97-0)	STEL	5 mg/m3	
,	TWA	3 mg/m3	
m-Cresol (CAS 108-39-4)	STEL	9 mg/m3	
		2 ppm	
	TWA	4,5 mg/m3	
		1 ppm	
p-Cresol (CAS 106-44-5)	STEL	9 mg/m3	

Components	Туре	Value
· · · ·		2 ppm
	TWA	4,5 mg/m3
		1 ppm
Phenol (CAS 108-95-2)	STEL	8 mg/m3
		2 ppm
	TWA	4 mg/m3
		1 ppm
Switzerland. SUVA Grenzwerte ar	n Arbeitsplatz	
Components	Туре	Value
Ethanol (CAS 64-17-5)	STEL	1920 mg/m3
	0.22	1000 ppm
	TWA	960 mg/m3
	1 0071	500 ppm
Formaldehyde (CAS	STEL	0,74 mg/m3
50-00-0)	•·	5,
		0,6 ppm
	TWA	0,37 mg/m3
		0,3 ppm
m-Cresol (CAS 108-39-4)	STEL	22 mg/m3
		5 ppm
	TWA	22 mg/m3
		5 ppm
p-Cresol (CAS 106-44-5)	STEL	22 mg/m3
·		5 ppm
	TWA	22 mg/m3
		5 ppm
Phenol (CAS 108-95-2)	STEL	19 mg/m3
•		5 ppm
	TWA	19 mg/m3
		5 ppm
UK. EH40 Workplace Exposure Li	mits (WELs)	
Components	Туре	Value
Ethanol (CAS 64-17-5)	TWA	1920 mg/m3
,		1000 ppm
Formaldehyde (CAS	STEL	2,5 mg/m3
50-00-0)		
		2 ppm
	TWA	2,5 mg/m3
		2 ppm
Phenol (CAS 108-95-2)	STEL	16 mg/m3
		4 ppm
	TWA	7,8 mg/m3
		2 ppm
EU. Indicative Exposure Limit Val	ues in Directives 91/322/EEC,	2000/39/EC, 2006/15/EC, 2009/161/EU
Components	Туре	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
Phenol (CAS 108-95-2)	STEL	16 mg/m3
		4 ppm
	TWA	8 mg/m3
		2 nnm

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	Phènol 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	*

 $[\]ensuremath{^*}$ - 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	Туре	Route	Value	Form
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

L-200 Nuclear Grade 13 / 21

Components	1 ypc	Route	Value	1 01111
Formaldehyde (CAS 50-00-0)	Workers	Dermal	240 mg/kg/day	Long term Systemic effects
		Inhalation	9 mg/m3	Long term Systemic effects
		Inhalation	1 mg/m3	Acute Local effects
		Inhalation	0,5 mg/m3	Long term Local effects
Hexamethylenetetramine (CAS 100-97-0)	Workers		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
		Inhalation	1400 mg/m3	Acute Systemic effects
m-Cresol (CAS 108-39-4)	Workers	Inhalation	343 mg/m3	Acute Systemic effects
		Inhalation	3,5 mg/m3	Long term Systemic effects
			0,9 mg/m3	Acute Local effects
			0,9 mg/m3	Long term Local effects
p-Cresol (CAS 106-44-5)	Workers	Inhalation	3,5 mg/m3	Long term Systemic effects
			233 mg/m3	Acute Systemic effects
			0,9 mg/m3	Acute Local effects
		Inhalation	0,9 mg/m3	Long term exposure locateffects
Phenol (CAS 108-95-2)	Workers		343 mg/m3	Acute exposure system effect
			3,5 mg/m3	Long term exposure systemic effects
		Inhalation	0,9 mg/m3	Acute exposure local effects
		Inhalation	0,9 mg/m3	
licted no effect concentrations (PNECs)	T		-	Long term exposure local effects
Components	Туре	Route	Value	Long term exposure loca
-	Aqua (freshwater) Aqua (intermittent		Value 0,96 mg/l	Long term exposure local effects
Components	Aqua (freshwater) Aqua (intermittent releases)	Route Not applicable Not applicable	Value 0,96 mg/l 2,75 mg/l	Long term exposure local effects
Components	Aqua (freshwater) Aqua (intermittent releases) Aqua (marine water)	Route Not applicable Not applicable Not applicable	Value 0,96 mg/l 2,75 mg/l 0,79 mg/l	Long term exposure local effects
Components	Aqua (freshwater) Aqua (intermittent releases) Aqua (marine water) Oral Sediment	Route Not applicable Not applicable	Value 0,96 mg/l 2,75 mg/l 0,79 mg/l 0,72 g/kg	Long term exposure loc effects
Components	Aqua (freshwater) Aqua (intermittent releases) Aqua (marine water) Oral	Route Not applicable Not applicable Not applicable Not applicable	Value 0,96 mg/l 2,75 mg/l 0,79 mg/l 0,72 g/kg 3,6 mg/kg	Long term exposure local effects
Components	Aqua (freshwater) Aqua (intermittent releases) Aqua (marine water) Oral Sediment (freshwater) Sewage Treatment	Route Not applicable Not applicable Not applicable Not applicable Not applicable	Value 0,96 mg/l 2,75 mg/l 0,79 mg/l 0,72 g/kg 3,6 mg/kg 580 mg/l	Long term exposure local effects
Components	Aqua (freshwater) Aqua (intermittent releases) Aqua (marine water) Oral Sediment (freshwater) Sewage Treatment Plant	Route Not applicable Not applicable Not applicable Not applicable Not applicable Not applicable	Value 0,96 mg/l 2,75 mg/l 0,79 mg/l 0,72 g/kg 3,6 mg/kg 580 mg/l 0,63 mg/kg	Long term exposure local effects
Components Ethanol (CAS 64-17-5)	Aqua (freshwater) Aqua (intermittent releases) Aqua (marine water) Oral Sediment (freshwater) Sewage Treatment Plant Soil	Route Not applicable Not applicable Not applicable Not applicable Not applicable Not applicable	Value 0,96 mg/l 2,75 mg/l 0,79 mg/l 0,72 g/kg 3,6 mg/kg 580 mg/l 0,63 mg/kg 0,47 mg/l	Long term exposure loc effects
Components Ethanol (CAS 64-17-5)	Aqua (freshwater) Aqua (intermittent releases) Aqua (marine water) Oral Sediment (freshwater) Sewage Treatment Plant Soil Aqua (freshwater) Aqua (intermittent	Route Not applicable	Value 0,96 mg/l 2,75 mg/l 0,79 mg/l 0,72 g/kg 3,6 mg/kg 580 mg/l 0,63 mg/kg 0,47 mg/l 4,7 mg/l	Long term exposure loc effects
Components Ethanol (CAS 64-17-5)	Aqua (freshwater) Aqua (intermittent releases) Aqua (marine water) Oral Sediment (freshwater) Sewage Treatment Plant Soil Aqua (freshwater) Aqua (intermittent releases)	Route Not applicable	Value 0,96 mg/l 2,75 mg/l 0,79 mg/l 0,72 g/kg 3,6 mg/kg 580 mg/l 0,63 mg/kg 0,47 mg/l 4,7 mg/l 0,47 mg/l 2,44 mg/kg	Long term exposure loc effects
Components Ethanol (CAS 64-17-5)	Aqua (freshwater) Aqua (intermittent releases) Aqua (marine water) Oral Sediment (freshwater) Sewage Treatment Plant Soil Aqua (freshwater) Aqua (intermittent releases) Aqua (marine water) Sediment (freshwater) Sediment (freshwater) Sediment (marine water)	Route Not applicable	Value 0,96 mg/l 2,75 mg/l 0,79 mg/l 0,72 g/kg 3,6 mg/kg 580 mg/l 0,63 mg/kg 0,47 mg/l 4,7 mg/l 0,47 mg/l 2,44 mg/kg 2,44 mg/kg	Long term exposure local effects
Components Ethanol (CAS 64-17-5)	Aqua (freshwater) Aqua (intermittent releases) Aqua (marine water) Oral Sediment (freshwater) Sewage Treatment Plant Soil Aqua (freshwater) Aqua (intermittent releases) Aqua (marine water) Sediment (freshwater) Sediment (marine water) Sediment (marine water) Sewage Treatment Plant	Route Not applicable	Value 0,96 mg/l 2,75 mg/l 0,79 mg/l 0,72 g/kg 3,6 mg/kg 580 mg/l 0,63 mg/kg 0,47 mg/l 4,7 mg/l 2,44 mg/kg 2,44 mg/kg 0,19 mg/l	Long term exposure loc effects
Ethanol (CAS 64-17-5) Formaldehyde (CAS 50-00-0)	Aqua (freshwater) Aqua (intermittent releases) Aqua (marine water) Oral Sediment (freshwater) Sewage Treatment Plant Soil Aqua (freshwater) Aqua (intermittent releases) Aqua (marine water) Sediment (freshwater) Sediment (marine water) Sediment (marine water) Sewage Treatment Plant Soil	Route Not applicable	Value 0,96 mg/l 2,75 mg/l 0,79 mg/l 0,72 g/kg 3,6 mg/kg 580 mg/l 0,63 mg/kg 0,47 mg/l 4,7 mg/l 2,44 mg/kg 2,44 mg/kg 0,19 mg/l 0,21 mg/kg	Long term exposure local effects
Components Ethanol (CAS 64-17-5)	Aqua (freshwater) Aqua (intermittent releases) Aqua (marine water) Oral Sediment (freshwater) Sewage Treatment Plant Soil Aqua (freshwater) Aqua (intermittent releases) Aqua (marine water) Sediment (freshwater) Sediment (freshwater) Sediment (marine water) Sediment (marine water) Sewage Treatment Plant Soil Aqua (freshwater)	Route Not applicable	Value 0,96 mg/l 2,75 mg/l 0,79 mg/l 0,72 g/kg 3,6 mg/kg 580 mg/l 0,63 mg/kg 0,47 mg/l 4,7 mg/l 2,44 mg/kg 2,44 mg/kg 0,19 mg/l 0,21 mg/kg 3 mg/l	Long term exposure loc effects
Ethanol (CAS 64-17-5) Formaldehyde (CAS 50-00-0)	Aqua (freshwater) Aqua (intermittent releases) Aqua (marine water) Oral Sediment (freshwater) Sewage Treatment Plant Soil Aqua (freshwater) Aqua (intermittent releases) Aqua (marine water) Sediment (freshwater) Sediment (freshwater) Sediment (marine water) Sediment (marine water) Sediment (marine water) Sediment (marine water) Aqua (freshwater) Aqua (freshwater) Aqua (intermittent releases)	Route Not applicable	Value 0,96 mg/l 2,75 mg/l 0,79 mg/l 0,72 g/kg 3,6 mg/kg 580 mg/l 0,63 mg/kg 0,47 mg/l 4,7 mg/l 0,47 mg/l 2,44 mg/kg 2,44 mg/kg 0,19 mg/l 0,21 mg/kg 3 mg/l 30 mg/l	Long term exposure loc effects
Ethanol (CAS 64-17-5) Formaldehyde (CAS 50-00-0)	Aqua (freshwater) Aqua (intermittent releases) Aqua (marine water) Oral Sediment (freshwater) Sewage Treatment Plant Soil Aqua (freshwater) Aqua (intermittent releases) Aqua (marine water) Sediment (freshwater) Sediment (marine water) Aqua (freshwater) Aqua (freshwater) Aqua (intermittent	Route Not applicable	Value 0,96 mg/l 2,75 mg/l 0,79 mg/l 0,72 g/kg 3,6 mg/kg 580 mg/l 0,63 mg/kg 0,47 mg/l 4,7 mg/l 0,47 mg/l 2,44 mg/kg 2,44 mg/kg 0,19 mg/l 0,21 mg/kg 3 mg/l 30 mg/l 0,5 mg/l	Long term exposure loc effects
Ethanol (CAS 64-17-5) Formaldehyde (CAS 50-00-0)	Aqua (freshwater) Aqua (intermittent releases) Aqua (marine water) Oral Sediment (freshwater) Sewage Treatment Plant Soil Aqua (freshwater) Aqua (intermittent releases) Aqua (marine water) Sediment (freshwater) Sediment (freshwater) Sediment (marine water) Sediment (marine water) Sediment (marine water) Aqua (freshwater) Aqua (freshwater) Aqua (intermittent releases) Aqua (marine water) Oral	Route Not applicable	Value 0,96 mg/l 2,75 mg/l 0,79 mg/l 0,72 g/kg 3,6 mg/kg 580 mg/l 0,63 mg/kg 0,47 mg/l 4,7 mg/l 0,47 mg/l 2,44 mg/kg 2,44 mg/kg 0,19 mg/l 0,21 mg/kg 3 mg/l 30 mg/l 0,5 mg/l 0,05 g/kg	Long term exposure local effects
Ethanol (CAS 64-17-5) Formaldehyde (CAS 50-00-0)	Aqua (freshwater) Aqua (intermittent releases) Aqua (marine water) Oral Sediment (freshwater) Sewage Treatment Plant Soil Aqua (freshwater) Aqua (intermittent releases) Aqua (marine water) Sediment (freshwater) Sediment (freshwater) Sediment (marine water) Sediment (marine water) Sediment (marine water) Aqua (freshwater) Aqua (freshwater) Aqua (intermittent releases) Aqua (marine water)	Route Not applicable	Value 0,96 mg/l 2,75 mg/l 0,79 mg/l 0,72 g/kg 3,6 mg/kg 580 mg/l 0,63 mg/kg 0,47 mg/l 4,7 mg/l 2,44 mg/kg 2,44 mg/kg 0,19 mg/l 0,21 mg/kg 3 mg/l 30 mg/l 0,5 mg/l 0,05 g/kg 11 mg/kg	Long term exposure loc effects

Route

Type

Value

Form

Components

Components	Туре	Route	Value	Form
	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	
Phenol (CAS 108-95-2)	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	
Evnocure controls				

8.2. Exposure controls

Appropriate engineering controls

Provide adequate ventilation. Observe occupational exposure limits and minimise the risk of exposure. 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 suitable gloves. Butyl rubber gloves are recommended. 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 In case of inadequate ventilation or risk of inhalation of vapours, use suitable respiratory

equipment with combination filter (type A2/P2).

Thermal hazards When material is heated, wear gloves to protect against thermal burns.

Hygiene measures Always observe good personal hygiene measures, such as washing after handling the material

and before eating, drinking, and/or smoking. Routinely wash work clothing and protective

equipment to remove contaminants.

Environmental exposure

controls

Environmental manager must be informed of all major spillages.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Appearance Amber liquid with phenolic odour.

Physical state Liquid.

Form Viscous liquid.
Colour Amber.
Odour Phenolic.

Odour threshold 0,003 - 5 ppm (m-Cresol)

pH Not applicable.Melting point/freezing point Not applicable.

L-200 Nuclear Grade 15 / 21

Initial boiling point and boiling

range

Not applicable.

25,6 °C (78 °F) ASTM D3278 Setaflash E Flash point

Evaporation rate Not applicable. Flammability (solid, gas) Not applicable.

Upper/lower flammability or explosive limits

Flammability limit - lower

(%)

Flammability limit - upper

(%)

Not available.

Not available.

Not applicable. Vapour pressure Vapour density Not applicable. Not available. Relative density

Solubility(ies) Slight.

Partition coefficient No data available.

(n-octanol/water)

Decomposition temperature > 648,9 °C (> 1200 °F) When cured

Not applicable. **Viscosity Explosive properties** Not available. **Oxidizing properties** Not available.

9.2. Other information

Flammable liquid and vapour. **Flammability**

Not applicable. Miscible (water)

SECTION 10: Stability and reactivity

10.1. Reactivity The product is non-reactive under normal conditions of use, storage and transport.

10.2. Chemical stability Material is stable under normal conditions. 10.3. Possibility of hazardous Hazardous polymerisation does not occur.

reactions

Flames and sparks. Avoid static discharge and uncontrolled exposure to high temperatures.

Contact with incompatible materials.

10.5. Incompatible materials Strong oxidizers, strong acids, and strong bases. Strong reducing agents.

10.6. Hazardous Carbon oxides. Formaldehyde. Nitrogen oxides (NOx).

decomposition products

10.4. Conditions to avoid

SECTION 11: Toxicological information

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

Information on likely routes of exposure

Harmful if swallowed. Ingestion

In high concentrations, vapours may be irritating to the respiratory system. Inhalation

Skin contact Causes severe skin burns. Causes severe eye damage. Eye contact

Symptoms Slightly corrosive. Prolonged contact may causes serious eye and tissue damage. Prolonged or

repeated inhalation/ingestion may cause central nervous system, blood, lung, liver or kidney

0,48 mg/l, 4 Hours

damage.

11.1. Information on toxicological effects

Harmful if swallowed. **Acute toxicity**

Components Species **Test results** Formaldehyde (CAS 50-00-0) Acute Inhalation

LC50 Rat

> Acute Dermal

m-Cresol (CAS 108-39-4)

LD50 Rabbit 620 mg/kg

2W LIQUID 16 / 21

Components	Species	Test results	
Oral			
LD50	Rat	242 mg/kg	
p-Cresol (CAS 106-44-5)			
Acute			
Dermal			
LD50	Rabbit	300 mg/kg	
Oral			
LD50	Rat	207 mg/kg	
Phenol (CAS 108-95-2)			
Acute			
Dermal			
LD50	Rabbit	850 mg/kg	
Oral			
LD50	Rat	530 mg/kg	
Skin corrosion/irritation	Causes severe skin hurns		

Skin corrosion/irritation Causes severe skin burns. Serious eye damage/irritation Causes serious eye damage.

Respiratory sensitisation Not available.

Skin sensitisation The product contains a small amount of sensitising substance which may provoke an allergic

reaction among sensitive individuals.

Germ cell mutagenicity Suspected of causing genetic defects.

Risk of cancer cannot be excluded with prolonged exposure. Carcinogenicity

IARC Monographs. Overall Evaluation of Carcinogenicity

Formaldehyde (CAS 50-00-0) 1 Carcinogenic to humans.

Phenol (CAS 108-95-2) 3 Not classifiable as to carcinogenicity to humans.

Reproductive toxicity Not available. Specific target organ toxicity -Not available. single exposure Specific target organ toxicity -Not available.

repeated exposure

Aspiration hazard

information

Not available.

Mixture versus substance Not available.

Other information Be aware that symptoms of lung oedema (shortness of breath) may develop up to 24 hours after

exposure.

SECTION 12: Ecological information

The product contains a substance which may be harmful to aquatic organisms and may cause 12.1. Toxicity

long-term adverse effects in the aquatic environment.

Components		Species	Test results
Formaldehyde (CAS 50-00	-0)		
Aquatic			
Crustacea	EC50	Water flea (Daphnia pulex)	4,3 - 7,8 mg/l, 48 hours
Fish	LC50	American eel (Anguilla rostrata)	0 - 197,79 mg/l, 96 hours
Hexamethylenetetramine (CAS 100-97-0)		
Aquatic			
Crustacea	EC50	Water flea (Daphnia magna)	29868 - 43390 mg/l, 48 hours
Fish	LC50	Bleak (Alburnus alburnus)	> 10000 mg/l, 96 hours
m-Cresol (CAS 108-39-4)			
Aquatic			
Crustacea	EC50	Scud (Gammarus fasciatus)	7 mg/l, 48 hours
Fish	LC50	Rainbow trout, donaldson trout (Oncorhynchus mykiss)	8,9 mg/l, 96 hours
o-Cresol (CAS 106-44-5)			
Aquatic			
Crustacea	EC50	Water flea (Daphnia magna)	7,7 mg/l, 48 hours

2W LIQUID Version No.: 01 Components **Species Test results**

Fish LC50 Fish (Lepidocephalichthyes guntea) 6,15 - 7,96 mg/l, 96 hours

12.2. Persistence and

degradability

No data available.

12.3. Bioaccumulative potential No data available. Partition coefficient No data available.

n-octanol/water (log Kow)

Formaldehyde 0.35 Phenol 1,46 1,94 p-Cresol m-Cresol 1,96

Bioconcentration factor (BCF) Not available. 12.4. Mobility in soil Not available.

Mobility in general The product is slightly soluble in water. The product contains volatile organic compounds (VOC)

which will evaporate easily from all surfaces.

12.5. Results of PBT

and vPvB assessment Not a PBT or vPvB substance or mixture.

12.6. Other adverse effects The product contains volatile organic compounds which have a photochemical ozone creation

potential. The product contains a substance which is harmful to aquatic organisms and which may

cause long-term adverse effects in the aquatic environment.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Residual waste Dispose of in accordance with local regulations.

Contaminated packaging Since emptied containers may retain product residue, follow label warnings even after container is

emptied.

EU waste code 08 04 09*

Disposal methods/information 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

14.1. UN number UN1866 14.2. UN proper shipping Resin solution

name

3 14.3. Transport hazard

class(es)

Subsidiary class(es) Ш 14.4. Packing group 14.5. Environmental hazards No

Tunnel restriction code Not available.

Labels required

14.6. Special precautions

for user

Not available.

RID

14.1. UN number UN1866 14.2. UN proper shipping Resin solution

name

14.3. Transport hazard 3

class(es)

Subsidiary class(es) 14.4. Packing group Ш 14.5. Environmental hazards No Labels required 3

14.6. Special precautions

for user

Not available.

3

ADN

14.1. UN number UN1866 14.2. UN proper shipping Resin solution

name

14.3. Transport hazard

class(es)

Subsidiary class(es)

2W LIQUID 18 / 21 14.4. Packing group III14.5. Environmental hazards No Labels required 3

14.6. Special precautions Not available.

for user

IATA

14.1. UN number UN186614.2. UN proper shipping Resin solution

name

14.3. Transport hazard 3

class(es)

Subsidiary class(es) - 14.4. Packing group

14.5. Environmental hazards Not available. **Labels required** Not available.

ERG Code 3L

14.6. Special precautions Not available.

for user

IMDG

14.1. UN number UN1866 **14.2. UN proper shipping** Resin solution

name

14.3. Transport hazard 3

class(es)

Subsidiary class(es) 14.4. Packing group ||||
14.5. Environmental hazards

Marine pollutant No

Labels requiredNot available.EmSF-E, S-E14.6. Special precautionsNot available.

for user

14.7. Transport in bulk

This substance/mixture is not intended to be transported in bulk.

according to Annex II of MARPOL 73/78 and the IBC

Code

SECTION 15: Regulatory information

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

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

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)

Hexamethylenetetramine (CAS 100-97-0)

m-Cresol (CAS 108-39-4) p-Cresol (CAS 106-44-5)

Phenol (CAS 108-95-2)

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

Formaldehyde (CAS 50-00-0)

Hexamethylenetetramine (CAS 100-97-0)

m-Cresol (CAS 108-39-4) p-Cresol (CAS 106-44-5) Phenol (CAS 108-95-2)

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.

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

National regulations

assessment

No Chemical Safety Assessment has been carried out.

SECTION 16: Other information

List of abbreviations DNEL: Derived No-Effect Level.

> PNEC: Predicted No-Effect Concentration. PBT: Persistent, bioaccumulative and toxic. vPvB: Very Persistent and very Bioaccumulative.

References 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

R10 Flammable.

R11 Highly flammable.

R20 Harmful by inhalation.

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.

R40 Limited evidence of a carcinogenic effect.

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.

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 eve damage.

H331 - Toxic if inhaled.

H335 - May cause respiratory irritation.

H341 - Suspected of causing genetic defects.

H351 - Suspected of causing cancer.

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.

2W LIQUID

Disclaimer

The information in the sheet was written based on the best knowledge and experience currently available.

2W LIQUID Version No.: 01