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SOLL EP HARDENER FOR EPOXY PRIMER 2+1

SECTION 1 Substance / Mixture identification and manufacturer/supplier identification

1.1 **Product identification**

Product name: SOLL EP HARDENER FOR EPOXY PRIMER 2+1

Product symbol: -

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

Hardener (2nd component) for hardening epoxy primer. This product is intended for professional use.

1.3 Data of the safety data sheet supplier

UAB HELVINA Parko str. 96, Ramučiai LT-54464 Kaunas distr., Lithuania

Tel: +370 37 308901 Faksas: +370 37 308902 E-mail: info@helvina.lt

Emergency telephone 1.4

Poison control and information office: Tel. +370 37 308901 or +370 687 53378

SECTION 2: Hazard identification

2.1 Classification of the substance or mixture

Classification according to the Regulation (EC) no 1272/2008

Hazard class, category code	Hazard class	Hazard code	Hazard type
Flam. Liq. 3	Flammable liquid, cat. 3	H226	Flammable liquid and vapor.
Acute Tox.4	Acute toxicity (inhalation), cat. 4	H332	Harmful if inhaled.
Skin Irrit. 2	Skin irritation, cat. 2	H315	Causes skin irritation.
Eye Dam. 1	Serious eye damage, cat. 1	H318	Causes serious eye damage.
Skin. Sens. 1	Skin sensitization, cat. 1	H317	May cause an allergic skin reaction.
STOT SE 3	Specific target organ toxicity – single exposure, cat. 3 respiratory irritation	Н335	May cause respiratory irritation.
STOT RE 2	Toxic effect on target organs—repeated exposure, cat. 2	Н373	May cause damage to organs through prolonged or repeated exposure.
Asp. Tox. 1	Aspiration hazard, cat. 1	H304	May be fatal if swallowed and enters airways.
Aquatic Chronic 2	Hazardous for the aquatic environment - chronic hazard, cat. 2	H411	Toxic to aquatic life with long-lasting effects.

2.2 Label elements

Signal word **Contains**

DANGER

Fatty acids, C18-unsaturated, dimers, high-oil fatty acid polymer and triethylenetetra; formaldehyde, a polymer with N, N-dimethyl-1,3propanediamine and phenol; 2,4,6-tris (dimethylaminomethyl) phenol

Pictograms









GHS08

GHS09

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Hazard statements

H226 Flammable liquid and vapor.

H332 Harmful if inhaled.
H315 Causes skin irritation.
H318 Causes serious eye damage.
H317 May cause an allergic skin reaction.
H335 May cause respiratory irritation.

H373 May cause damage to organs through prolonged or repeated exposure.

H304 May be fatal if swallowed and enters airways.H411 Toxic to aquatic life with long-lasting effects.

Precautionary statements

Prevention

P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No

smoking.

P260 Avoid breathing vapor, spray.

P273 Do not release the product to the environment.

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

Reaction

P302+ P352 IF ON SKIN: Wash with plenty of soap and water.

P301 + P310 + IF SWALLOWED: Rinse mouth. Do not induce vomiting.

P331

P314 Get medical advice, attention if you feel unwell.

P391 Collect spillage.

Storage

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

Disposal

P501 Dispose of contents/container to: landfill for hazardous substances.

Additional information on the label

2.3 Other hazards

No data.

SECTION 3: Composition/information on ingredients

3.1 Substances

Not applicable.

3.2 Mixtures

Chemical nature: mixture of organic compounds with additives.

Substance name	Concen tration %	CAS	EC	Index	Registration no	Hazard class
xylene	35–45	1330-20-7	215-535-7	601- 022 - 00- 9	01-2119488216-32- xxxx	Flam. Liq. 3 H226 Acute Tox. 4 H312 Acute Tox. 4 H332 Skin Irrit. 2 H315 Eye Irrit. 2 H319 STOT SE 3 H335 STOT SE 3 H336 STOT RE 2 H373 Asp. Tox. 1 H304
fatty acids, C18- unsaturated, dimers, polymer with high oil fatty acids and triethylene tetra	20–30	68082- 29-1	-	-	-	Skin Irrit. 2 H315 Eye Dam.1 H318 Skin Sens. 1 H317 Aquatic Chronic 3 H412

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n-butyl alcohol	5–15	71-36-3	200-751-6	603- 004 - 00- 6	01-2119484630-38- xxxx	Acute Tox.4 H302 STOT SE 3 H335 STOT SE 3 H336 Eye Dam.1 H318 Skin Irrit.2 H315 Flam. Liq.3 H226
ethylbenzene	5–15	100-41-4	202-849-	601- 023 - 00- 4	01-2119489370-35- xxxx	Flam. Liq. 2 H225 Acute Tox. 4 H332 STOT RE 2 H373 Asp. Tox. 1 H304
formaldehyde, a polymer with N, N- dimethyl-1,3- propanediamine and phenol	< 5	445498- 00-0	-	-	-	Acute Tox. 4 H302 Aquatic Acute 1 H400 Aquatic Chronic 1 H410
2,4,6-tris (dimethylaminomethyl) phenol	< 2	90-72-2	202-013-	603- 069 -00 -0	01-2119560597-27- xxxx	Skin Corr. 1C H314 Eye Dam. 1 H318 Acute Tox. 4 H302
amines, polyethylene poly-, triethylenetetramine fraction	< 0.5	90640- 67-8	292-588- 2	-	-	Acute Tox.4 H302 Acute Tox.4 H312 Skin Corr.1B H314 Skin Sens.1 H317 Eye Dam.1 H318 Aquatic Chronic 3 H412

Full text of hazard statements provided in section 16.

SECTION 4: First aid measures

4.1 Description of first aid measures

Airways:

Remove the victim from the area of exposure, provide access to fresh air. In case of respiratory arrest apply artificial respiration. Provide medical aid if needed.

Ingestion:

Rinse mouth with water. Do not give anything to an unconscious person to swallow. Do not induce vomiting. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. Provide medical aid if needed.

Contact with eyes:

Remove contact lenses. Rinse with plenty of water with the eyelid held wide open, avoiding a strong water jet. If necessary consult an ophthalmologist.

Contact with skin:

Take off contaminated clothes and shoes. Wash skin with plenty of water and soap. If skin irritation occurs, consult a doctor.

4.2 Most important symptoms both acute and delayed

High doses of vapors may cause: dizziness, drowsiness, headache, loss of consciousness. Contact with skin may cause allergic reactions, its dryness and cracking. May cause damage to organs.

4.3 Indications of any immediate medical attention and special treatment needed

Symptomatic treatment. Provide the doctor with the product safety data sheet. First aiders should pay attention to their own personal protection.

SECTION 5: Firefighting measures

5.1 Extinguishing media

Suitable extinguishing media: carbon dioxide CO₂, extinguishing powders, alcohol-resistant foam, water mist. Unsuitable extinguishing media: full jet of water.

5.2 Special hazards arising from the substance or mixture

Flammable liquid mixture. Combustion may form carbon oxides and other toxic gases. Vapors may re-ignite.

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5.3 Advice for fire fighters

Use self-contained breathing apparatus and full protective clothing. Tanks exposed to high temperature should be cooled with water from a safe distance and, if possible, removed from the endangered area. Collect the extinguishing water. Prevent extinguishing water from entering the surface or ground water.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency measures

Evacuate personnel to a safe place. Eliminate ignition sources. Avoid breathing vapor / mist / spray. Ensure adequate ventilation. Avoid contamination of eyes, skin and clothes. Use protective clothing and equipment.

6.2 Environmental precautions

Prevent from entering sewage system, surface water, ground water or soil. In the event of serious contamination of a watercourse, sewage system or soil, notify the appropriate administrative and control authorities and rescue organizations.

6.3 Methods and materials for containment and cleaning up

Eliminate the source of the leak. Collect small spills with non-combustible absorbent material. Collect large spills mechanically. Collect contaminated soil.

6.4 Reference to other sections

Personal protection measures – see section 8 of the Sheet.

Disposal considerations – see section 13 of the Sheet.

SECTION 7: Handling and storage of substances and mixtures

7.1 Precautions for safe handling

Avoid open flames and high temperature. Work in well ventilated rooms. Do not breathe vapors or spray. Avoid contamination of eyes, skin and clothes. Do not eat or drink at the site where the product is used. Wash hands before each break and at the end of work. Observe the rules of personal hygiene

7.2 Conditions for safe storage, including any incompatibilities

Store in tightly sealed, original containers. Store in a cool and well ventilated area. Away from oxidants and sources of heat and fire. Avoid electrostatic discharge.

7.3 Special end use(s)

No data.

SECTION 8: Exposure control/personal protection measures

8.1 Control parameters

Maximum permissible concentrations:

SUBSTANCE	CAS	MPC (mg/m³)	MPIC (mg/m³)	MPCC (mg/m³)	Note: Labeling the substance with notation ,,skin"*
xylene	1330-20-7	100	200	-	skin
n-butyl alcohol	71-36-3	50	150	-	skin
ethylbenzene	100-41-4	200	400	-	skin

^{*} Labeling the substance with the notation "skin" means that the absorption of the substance through the skin may be just as important as for inhalation exposure.

CAS number	Absorbed substance	Marked substance	Biological Material	PBC values
1330-20-7	xylene	Methyl hippuric acid	urine*	0,75 g/g creatinine

^{*} sample collected once, at the end of the daily exposure on any given day.

DNEL value

DI ILL I III					
xylene	DNEL value	workers	skin	long-term exposure -	212 mg/kg b.
				systemic effects	w./day

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				-	
	DNEL value	workers	inhalation	acute exposure - local effects	442 mg/m ³
	DNEL value	workers	inhalation	acute exposure - systemic effects	442 mg/m ³
	DNEL value	workers	inhalation	long-term exposure - systemic effects	221 mg/m ³
	DNEL value	workers	inhalation	long-term exposure - systemic effects	221 mg/m ³
	DNEL value	consumers	ingestion	long-term exposure - systemic effects	12.5 mg/kg b. w./day
	DNEL value	consumers	skin	long-term exposure - systemic effects	125 mg/kg b. w./day
	DNEL value	consumers	inhalation	acute exposure - local effects	260 mg/m ³
	DNEL value	consumers	inhalation	acute exposure - systemic effects	260 mg/m ³
	DNEL value	consumers	inhalation	long-term exposure - systemic effects	65.3 mg/m ³
	DNEL value	consumers	inhalation	long-term exposure - systemic effects	65.3 mg/m ³
n-butyl alcohol	DNEL value	workers	inhalation	long-term exposure - systemic effects	310 mg/m ³
	DNEL value	workers	inhalation	long-term exposure - local effects	310 mg/m^3
	DNEL value	consumers	inhalation	long-term exposure - systemic effects	55.357 mg/m ³
	DNEL value	consumers	ingestion	long-term exposure - systemic effects	1.5625 mg/kg
	DNEL value	consumers	inhalation	long-term exposure - local effects	155 mg/m ³
	DNEL value	consumers	skin	long-term exposure - systemic effects	3.125 mg/kg
ethylbenzene	DNEL value	workers	skin	long-term exposure -	180 mg/kg b.
	DNEL value	workers	inhalation	systemic effects acute exposure - local	w./day 293 mg/m ³
	DNEL value	vvanleans	inhalation	effects	77 mg/m ³
		workers		long-term exposure - systemic effects	
	DNEL value	consumers	inhalation	long-term exposure - systemic effects	15 mg/m ³
	DNEL value	consumers	ingestion	long-term exposure - systemic effects	1.6 mg/kg b. w./day
	T = :	T -			
amines, polyethylene	DNEL value	workers	inhalation	long-term exposure - systemic effects	1 mg/m ³
poly-, triethylenetet	DNEL value	workers	inhalation	acute exposure - systemic effects	5380 mg/m ³
ramine fraction	DNEL value	workers	skin	long-term exposure - systemic effects	0.57 mg/kg b. w./day
	DNEL value	workers	skin	long-term exposure - systemic effects	0,028 mg/cm ²
	DNEL value	consumers	inhalation	long-term exposure - systemic effects	0.29 mg/m ³
	DNEL value	consumers	inhalation	acute exposure - systemic effects	1600 mg/m ³
	<u>-</u>	•		·	

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DNEL value	consumers	skin	long-term exposure - systemic effects	0.25 mg/kg b. w./day
DNEL value	consumers	skin	acute exposure - systemic effects	8 mg/kg b. w./day
DNEL value	consumers	skin	long-term exposure - systemic effects	0,43 mg/cm ²
DNEL value	consumers	skin	acute exposure - local effects	1 mg/cm ²
DNEL value	consumers	ingestion	long-term exposure - systemic effects	0.41 mg/kg b. w./day
DNEL value	consumers	ingestion	acute exposure - systemic effects	20 mg/kg b. w./day

PNEC value

xylene	PNEC value	fresh water	0,327 mg/l
	PNEC value	marine water	0,327 mg/l
	PNEC value	sediment (fresh water and marine	12,46 mg/kg d. m. of sediment
		water)	
	PNEC value	sediment (marine water)	12,46 mg/kg d. m. of sediment
	PNEC value	biological sewage treatment plant	6,58 mg/dm3
	PNEC value	soil	2,31 mg/kg d. m. of soil

n-butyl	PNEC value	fresh water	0,082 mg/l
alcohol	PNEC value	marine water	0,0082 mg/l
	PNEC value	sediment (fresh water and marine water)	0, 324mg/kg
	PNEC value	sediment (marine water)	0,0324 mg/kg
	PNEC value	soil	0,015 mg/kg
	PNEC value	sewage treatment plant	2476 mg/l
	PNEC value	intermittent release	2,25 mg/l

ethylbenzene	PNEC value	fresh water	0.1 mg/l
	PNEC value	marine water	0.01 mg/l
	PNEC value	sediment (fresh water and marine	13,7 mg/kg d. m. of sediment
		water)	
	PNEC value	sediment (marine water)	1,37 mg/kg d. m. of sediment
	PNEC value	biological sewage treatment plant	9,6 mg/dm ³
	PNEC value	soil	2,68 mg/kg d. m. of soil

2,4,6-tris	PNEC value	fresh water	0,084 mg/l
(dimethylami	PNEC value	marine water	0,0084 mg/l
nomethyl)	PNEC value	sewage treatment plant	0.2 mg/dm^3
phenol		_ •	_

amines,	PNEC value	fresh water	190 μg/l
polyethylene	PNEC value	marine water	38 μg/l
poly-,	PNEC value	fresh water- periodically	200 μg/l
triethylene	PNEC value	sewage treatment plant	$4,25 \text{ mg/dm}^3$
tetramine	PNEC value	sediment (fresh water and marine	95,5 mg/kg d. m.
fraction		water)	
	PNEC value	sediment (marine water)	19,2 mg/kg d. m.
	PNEC value	soil	19,1 mg/kg d. m.
	PNEC value	secondary poisoning	0,18 mg/kg d. m.

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8.2 Exposure control

Technical control measures

General and local exhaust ventilation. Explosion-proof electrical installation.

Personal protective measures

Eye or face protection

Protective goggles/ tight safety glasses.

Skin protection

Gloves resistant to chemicals, made of butyl rubber (thickness 0.7 mm, breakthrough time> 480 min). As the product is a mixture of several substances, the resistance of the glove material cannot be calculated in advance and has therefore to be checked before application. The manufacturer of the protective gloves provides information on the breakthrough time of the substance.

Protective, anti-electrostatic clothing and footwear.

Respiratory protection

In case of insufficient ventilation use a mask with an organic vapor filter of Type A or better (EN 140 or EN 141).

When cutting, grinding or sandblasting cured components, it may generate dust particles which may be inhaled.

24 °C

Environmental exposure control

Prevent from entering into sewage system, water and soil.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

Physical state liquid
Color clear
Odor: characteristic
Melting/freezing point: no data
Boiling point; °C: >100

Flammability of the product: flammable liquid and vapor Bottom and top explosion limit (% v/v): 1,0 vol.% - 7,1 vol.% (xylene)

Auto ignition point; °C: no data **Breakdown point:** no data pH: no data Kinematic viscosity (mm²/s at 40 °C) **Solubility:** no data n-octanol/water partition coefficient: no data Vapor pressure: no data approx. 0.9 Density (g/cm³) at 20 °C; Relative vapor density: no data **Characteristics of the particles:** no data

9.2 Other information

Flash point; °C:

No data.

SECTION 10: Stability and reactivity

10.1 Reactivity

No hazardous reactions known under normal conditions of use

10.2 Chemical stability

Stable under normal conditions.

10.3 Possibility of hazardous reactions

No data

10.4 Conditions to be avoided

High temperatures, sources of heat and fire.

10.5 Incompatible materials

No data.

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10.6 Hazardous decomposition products

When properly stored, no hazardous decomposition products are formed.

SECTION 11: Toxicological information

11.1 Information on the hazard classes as defined in Regulation (EC) No. 1272/2008

There are no experimental data on toxicological effects of the product. The assessment was based on the data on components included in the product.

Acute toxicity:

 $\begin{array}{ccc} \text{xylene - mixture of isomers} & \text{LD}_{50} \, (\text{rat, oral}) & >2000 \, \text{mg/kg} \\ \text{LC}_{50} \, (\text{rat, inhalation}) & >20 \, \text{mg/dm}^3 / 4h \\ \text{LD}_{50} \, (\text{rabbit, skin}) & >2000 \, \text{mg/kg} \\ \end{array}$

n-butyl alcohol $\begin{array}{ccc} LD_{50} \ (rat, \, oral) & 2292 \ mg/kg \\ LD_{50} \ (rabbit, \, skin) & 3430 \ mg/kg \end{array}$

LC₅₀ (rat, inhalation) $>17.76 \text{ mg/dm}^3/4\text{h}$

ethylbenzene LD_{50} (rat, oral) 3500 mg/kg LC_{50} (rat, inhalation) 17,8 mg/dm³/4h

 LC_{50} (rat, innalation) 17,8 mg/dm²/4n LD_{50} (skin) 15400 mg/kg TCL0 (human, inhalation) 442 mg/dm³/8h

2,4,6-tris (dimethylaminomethyl) phenol LD₅₀ (rat, skin) >971 mg/kg

amines, polyethylene poly-, triethylene LD₅₀ (rabbit, skin) 1465.4 mg/kg

tetramine fraction

 ATE_{mix} (oral) >2000 mg/kg of body weight ATE_{mix} (skin) >2000 mg/kg of body weight ATE_{mix} (inhalation) $10 < ATE_{mix} < 20$ mg/l

The ATEmix values have been calculated using the relevant conversion factor in Table 3.1.2. derived from Regulation 1272/2008/EC, as amended.

The mixture is classified as acute toxicity through airways.

Skin corrosion/irritation:

The mixture is classified as causing skin irritation.

Serious eye damage/eye irritation:

The mixture is classified as causing serious eye damage.

Allergic effect on airways or skin:

The mixture is classified as causing skin irritation.

Mutagenic effect on germ cells:

The mixture is not classified as mutagenic. No data confirming the hazard.

Carcinogenic effect:

The mixture is not classified as carcinogenic.. No data confirming the hazard.

Harmful effect on reproduction:

The mixture is not classified as having harmful effect on reproduction. No data confirming the hazard

Toxic effect on target organs – single exposure:

The mixture is classified as toxic to target organs - single exposure. May cause respiratory irritation.

Toxic effect on target organs - repeated exposure:

The mixture is classified as toxic to target organs - repeated exposure.

Aspiration hazard:

The mixture is classified as causing aspiration hazard.

11.2 Information on other hazards

No data.

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SECTION 12: Ecological information

12.1 Toxicity

There are no experimental data on toxicological effects of the product. The assessment was based on the data on components included in the product.

acute toxicity to fish (Pimephales promelas)	LC ₅₀ 16.1 mg/l/96h
acute toxicity to fish (Oncorhynchus mykiss)	LC ₅₀ 2.6 mg/l/96h
acute toxicity to aquatic invertebrates (Daphnia magna)	EC ₅₀ 3.82 mg/l/48h
acute toxicity to algae	EC ₅₀ 2.2 mg/l/73h
acute toxicity to fish (Pimephales promelas)	LC ₅₀ 1376 mg/l/96h
acute toxicity to daphnia (Daphnia magna)	EC ₅₀ 1382 mg/l/48h
acute toxicity to aquatic plants (Pseudokirchneriella subcapitata)	EC ₅₀ 225 mg/l/96h
long-term toxicity to daphnia (Daphnia magna)	NOEC 4,1 mg/l/21 d
toxicity to fish (Pimephales promelas)	LC ₅₀ 49 mg/l/96h
acute toxicity to aquatic invertebrates (Daphnia magna)	EC ₅₀ 184 mg/l/24h
toxicity to fish (Brachydanio rerio)	LC ₅₀ 40 mg/l/96h
toxicity to daphnia and other aquatic invertebrates	EC ₅₀ 24 mg/l/48h
Toxicity to algae (Selenastrum capricornutum)	$EC_{50} > 219 \mu g/l/72h$
toxicity to fish (Cyprinus carpio) toxicity to daphnia and other aquatic invertebrates toxicity to algae (Desmodesmus subspicatus)	LC ₅₀ 175 mg/l/96h LC ₅₀ 718 mg/l/96h E _r C50 84 mg/l/72h
	acute toxicity to fish (Oncorhynchus mykiss) acute toxicity to aquatic invertebrates (Daphnia magna) acute toxicity to algae acute toxicity to fish (Pimephales promelas) acute toxicity to daphnia (Daphnia magna) acute toxicity to aquatic plants (Pseudokirchneriella subcapitata) long-term toxicity to daphnia (Daphnia magna) toxicity to fish (Pimephales promelas) acute toxicity to aquatic invertebrates (Daphnia magna) toxicity to fish (Brachydanio rerio) toxicity to daphnia and other aquatic invertebrates (Daphnia magna) Toxicity to algae (Selenastrum capricornutum) toxicity to fish (Cyprinus carpio) toxicity to daphnia and other aquatic invertebrates

12.2 Persistence and degradability

xylene - biodegradable

2,4,6-tris (dimethylaminomethyl) phenol: biodegradation 4%/28 days

amines, polyethylene poly-, triethylene tetramine fraction: biodegradation: biodegradacj 0%/162 days (Method: OECD Test Directive 301D, OECD), biodegradation: 20%/84 days (Method: OECD Test Directive 302 A, OECD).

12.3 Bioaccumulative potential

ethylbenzene – log Pow 3,15

12.4 Mobility in soil

ethylbenzene - distribution between elements of the environment: log Koc: 3.12

12.5 Results of PBT and vPvB assessment

The product does not meet the criteria of PBT or vPvB classification

12.6 Endocrine disrupting properties

No data.

12.7 Other hazardous effects

No data.

SECTION 13: Disposal considerations

13.1 Waste treatment methods

Used packaging and waste product should be delivered to authorized companies. Dispose of according to applicable local and official waste regulations – see section 15.

Waste code

08 01 11* Waste paints and varnishes containing organic solvents or other dangerous substances.

15 01 10* Packaging containing residues of or contaminated by dangerous substances

or contaminated by dangerous substances (e.g. pesticides of I and II class of toxicity – very

toxic or toxic).

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14.1	UN number or ID number	ADR/RID 1866	IMGD 1866	IATA 1866
14.2	UN proper shipping name		RESIN IN SOLUTION	
14.3	Transport hazard class (-es)	3	3	3
14.4	Packaging group	III	III	III
14.5	Environmental hazard	no	no	no
14.6	Special precautions for users		Not applicable.	
14.7	Maritime transport in bulk in accordance with IMO instruments		Not applicable.	

SECTION 15: Regulatory information

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

Regulation (EC) No 1907/2006 of the European Parliament and of the Council of 18 December 2006 concerning the Registration, Evaluation, Authorization and Restriction of Chemicals (REACH), establishing a European Chemicals Agency, amending Directive 1999/45/EC and repealing Council Regulation (EEC) No 793/93 and Commission Regulation (EC) No 1488/94 as well as Council Directive 76/769/EEC and Commission Directives 91/155/EEC, 93/67/EEC, 93/105/EC and 2000/21/EC as amended.

Regulation (EC) No 1272/2008 of the European Parliament and of the Council of 16 December 2008 on classification, labeling and packaging of substances and mixtures, amending and repealing Directives 67/548/EEC and 1999/45/EC, and amending Regulation (EC) No 1907/2006 as amended

Law of 25 February 2011; on chemical substances and mixtures thereof (Journal of Laws No. 63, item 322, 2011), the consolidated text of 24 November 2017 (Journal of Laws, item 143, 2017) as amended.

Regulation of the Minister of Family, Labor and Social Policy of June 12, 2018 regarding the highest allowable concentrations and intensities of factors harmful to health in the work environment (Journal of Laws, item 1286, 2018).

Regulation of the Minister of Health of February 2, 2011 regarding tests and measurements of factors harmful to health in the work environment (Journal of Laws, item 166, 2011)

Notice of the Minister of Health of 9 September 2016 regarding the publication of a uniform text of the Regulation of the Minister of Health on occupational health and safety related to the occurrence of chemical agents in the workplace (Journal of Laws, item 1488, 2016).

Government Declaration of July 26, 2005 on the entry into force of amendments to Annexes A and B of the European Agreement concerning the international carriage of dangerous goods by road (ADR) drawn up at Geneva on September 30, 1957 (Journal of Laws No. 178, item . 1481, 2005 as amended).

The Law of 14 December 2012 on waste (Journal of Laws item 21, 2013 as amended)

The Law of 20 July 2018 amending the act on waste and certain other acts (Journal of Laws, item 1592, 2018). The Law of 13 June 2013 on the management of packaging and packaging waste (Journal of Laws, item 888, 2013).

Regulation of the Minister of Climate of 2 January 2020 on the waste catalog (Journal of Laws, item 10, 2020).

15.2 Chemical safety assessment

Chemical safety assessment has not been carried out.

SECTION 16: Other information

Full text of hazard statements mentioned in section 2-15

Flam. Liq. 2 Flammable liquid, cat. 2

H225 Highly flammable liquid and vapor.

Flam. Liq. 3 Flammable liquid, cat. 3 H226 Flammable liquid and vapor.

Acute Tox. 4 Acute toxicity, cat. 4
H302 Harmful if swallowed.
H312 Harmful in contact with skin.

H332 Harmful if inhaled. Skin. Sens. 1 Skin sensitization, cat. 1

In accordance with Annex II to Regulation (EC) No 1907/2006 of the European Parliament and of the Council of 18 December 2006 with following amendments.



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H317 May cause an allergic skin reaction.

STOT SE 3 Specific target organ toxicity – single exposure, cat. 3

May cause respiratory irritation. H335 H336 May cause drowsiness or dizziness.

Eye Dam. 1 Serious eye damage, cat. 1 H318 Causes serious eye damage.

Eye Irrit. 2 Eye irritation, cat. 2

H319 Causes serious eye irritation. Skin Corr. 1B Skin corrosion, cat. 1B

Causes serious skin burns and eye damage. H314

Skin irritation, cat. 2 Skin Irrit. 2 Causes skin irritation. H315

STOT RE 2 Specific target organ toxicity - repeated exposure, cat. 2

H373 May cause damage to organs through prolonged or repeated exposure

Aquatic Hazardous for the aquatic environment - acute hazard, cat. 1

Acute 1

H400 Very toxic to aquatic life

Hazardous for the aquatic environment - chronic hazard, cat 1 Aquatic

Chronic 1

H410 Very toxic to aquatic life with long-lasting effects.

Aquatic Hazardous for the aquatic environment - chronic hazard, cat 3

Chronic 3

H412 Harmful to aquatic life with long-lasting effects.

Explanation of abbreviations

EC reference number used in the European Union to identify hazardous substances, in particular those registered in the European Inventory of Existing Chemical Substances (EINECS), or in European List of Notified Chemical Substances (ELINCS), or the list of chemicals listed in 'Nolonger polymers'

CAS a number assigned to a chemical substance in Chemical Abstracts Service

maximum permissible concentration at the workplace - the highest permissible weighted average **MPC**

concentration, whose impact on the employee during 8 hours of work, throughout the entire period of his professional activity, should not cause changes in his state of health and the state of

health of his future generations

MPIC maximum permissible instantaneous concentration - the maximum permissible instantaneous

concentration set as an average value that should not cause negative changes in the state of health

of the worker and the state of health of his future generations, if it persists in the work

environment for no more than 30 minutes during a shift

MPCC concentration value which, due to the threat to the employee's health or life, cannot be exceeded

in the work environment at any time

very Persistent and very Bio-accumulative vPvB PBT Persistent, Bio-accumulative and toxic

lethal dose - the dose at which deaths of 50% of test animals are observed over a specified period DL_{50}

of time

 CL_{50} lethal concentration - the concentration at which deaths of 50% of the test animals are observed

over a specified period of time

effective concentration - the effective concentration of the substance causing a response at 50% CE_{50}

of the maximum value

DNEL no-harmful level for human health - the level of exposure to a substance not harmful to human

health

Predicted no-effect concentration - the concentration of the substance below which no harmful **PNEC**

effects are expected

PBC permissible concentration in biological material - the highest permissible level of a specific

factor or its metabolite in the relevant biological material or the highest permissible value of an

appropriate indicator determining the impact of a chemical agent on the body

BCF bioconcentration factor - the ratio of the concentration of a substance in the body to its

concentration in water at equilibrium

European Agreement concerning the International Carriage of Dangerous Goods by Road. **ADR**

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UN number four-digit material identification number in the UN Hazardous Materials List, derived from the

UN Model Regulations, to which the individual material, mixture or object is classified

RID Regulations Concerning the International Transport of Dangerous Goods by Rail

IMDG International Maritime Dangerous Goods Code

IATA International Air Transport Association

Recommended use

The product is intended for professional use only

Other data sources

http://echa.europa.eu/web/guest/information-on-chemicals/registered-substances

Other information

The product described in the safety data sheet should be stored and used in accordance with good industrial practice and in accordance with all legal regulations. The information and recommendations contained in the safety data sheet are based on our general experience and our latest knowledge, and have been presented in good faith. No part of this publication can be treated as guarantee, warranty or position directly, indirectly or otherwise. In all cases, it is the user's responsibility to determine and verify that the information and recommendations are accurate, sufficient and relevant to the particular case. The user is responsible for creating the conditions for the safe use of the product and he is responsible for the consequences of incorrect use of this product.

Classification of mixtures and evaluation method in accordance with regulation (EC) No. 1272/2008 [CLP] Calculation method.

Changes

Reclassification.

Training

Before working with the product, the user should read the Safety Data Sheet and OHS rules regarding the handling of chemicals, and in particular undergo appropriate workplace training.

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The above edition replaces the previous one.