

Safety Data Sheet**Epo Grout 3C Plus Comp. A**

Safety Data Sheet dated: 01/09/2022 - version 1

► SECTION 1: Identification of the substance/mixture and of the company/undertaking**1.1. Product identifier**

Mixture identification:

Trade name: Epo Grout 3C Plus Comp. A

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

Recommended use: Injection and anchoring

Uses advised against: Data not available

1.3. Details of the supplier of the safety data sheet

Company: DC Industries S.r.l. - Via Sorte, 2 - 24030 Barzana, BG

Tel. +(39) 551 233 0221 (office hours) - www.dc-industries.itResponsible: sicurezza@dcindustries.it**1.4. Emergency telephone number**

Centro antiveleni, Azienda ospedaliera "Antonio Cardarelli", III Servizio di anestesia e rianimazione, via Antonio Cardarelli 9, Napoli - Tel. 081 5453333

Centro antiveleni, Azienda ospedaliera universitaria Careggi, U.O. Tossicologia medica, via Largo Brambilla 3, Firenze - Tel. 055 7947819

Centro antiveleni, Centro nazionale d'informazione tossicologica, IRCCS Fondazione Salvatore Maugeri Clinica del lavoro e della riabilitazione, via Salvatore Maugeri 10, Pavia - Tel. 0382 24444

Centro antiveleni, Azienda ospedaliera Niguarda Ca' Granda, piazza Ospedale Maggiore 3, Milano - Tel. 02 66101029

Centro antiveleni, Azienda ospedaliera "Papa Giovanni XXIII", Tossicologia clinica, Dipartimento di farmacia clinica e farmacologia, piazza OMS 1, Bergamo - Tel. 800 883300

Centro antiveleni Policlinico "Umberto I", PRGM tossicologia d'urgenza, viale del Policlinico 155, Roma - Tel. 06 49978000

Centro antiveleni del Policlinico "Agostino Gemelli", Servizio di tossicologia clinica, largo Agostino Gemelli 8, Roma - Tel. 06 3054343

Centro antiveleni, Azienda ospedaliera universitaria Riuniti, viale Luigi Pinto 1, Foggia - Tel. 800 183459

Centro antiveleni, Ospedale pediatrico Bambino Gesù, Dipartimento emergenza e accettazione DEA, piazza Sant'Onofrio 4, Roma - Tel. 06 68593726

Centro antiveleni dell'Azienda ospedaliera universitaria integrata (AOUI) di Verona sede di Borgo Trento, piazzale Aristide Stefani, 1 - 37126 Verona - Tel. 800 011858

► SECTION 2: Hazards identification**2.1. Classification of the substance or mixture**

Skin Irrit. 2 Causes skin irritation.

Eye Irrit. 2 Causes serious eye irritation.

Skin Sens. 1A May cause an allergic skin reaction.

Aquatic Chronic 3 Harmful to aquatic life with long lasting effects.

Adverse physicochemical, human health and environmental effects:

No other hazards

**2.2. Label elements****Regulation (EC) n. 1272/2008 (CLP)****Pictograms and Signal Words**

Warning

Hazard statements:

H315 Causes skin irritation.

H317 May cause an allergic skin reaction.

H319 Causes serious eye irritation.

H412 Harmful to aquatic life with long lasting effects

Precautionary statements:

P261 Avoid breathing mist/vapours/spray.

P264 Wash hands thoroughly after handling.
P273 Avoid release to the environment.
P280 Wear protective gloves/clothing and eye/face protection.
P333+P313 If skin irritation or rash occurs: Get medical advice/attention.
P337+P313 If eye irritation persists: Get medical advice/attention.

Special Provisions:

EUH208 Contains reaction product: bisphenol-A-(epichlorhydrin); epoxy resin (number average molecular weight ≤ 700). May produce an allergic reaction.

EUH208 Contains oxirane, mono[(C12-14-alkyloxy)methyl] derivs.. May produce an allergic reaction. EUH208

Contains Reaction mass of Bis(1,2,2,6,6-pentamethyl-4-piperidyl) sebacate and Methyl 1,2,2,6,6-pentamethyl-4-piperidyl sebacate. May produce an allergic reaction.

EUH205 Contains epoxy constituents. May produce an allergic reaction.

EUH211 Warning! Hazardous respirable droplets may be formed when sprayed. Do not breathe spray or mist.

Contains:

Formaldehyde, oligomeric reaction products with 1-chloro-2,3-epoxypropane and phenol

Special provisions according to Annex XVII of REACH and subsequent amendments:

None.

2.3. Other hazards

No PBT, vPvB or endocrine disruptor substances present in concentration $\geq 0.1\%$.

Other Hazards: No other hazards

This product contains crystalline silica (quartz sand). IARC has classified crystalline silica as a Group 1 carcinogen. Both IARC and NTP consider silica as a known human carcinogen. Evidence is based on the chronic and long-term exposure workers have had to respirable sized crystalline silica dust particles. Because this product is in liquid or paste form, it does not pose a dust hazard; therefore, this classification is not relevant. (Note: sanding of the hardened product may create a silica dust hazard)

This preparation contains low molecular weight epoxy resins. Cross sensitisation to other epoxies is possible. Avoid also exposure to spray mist and vapour.

► SECTION 3: Composition/information on ingredients

3.1. Substances

Not Relevant

3.2. Mixtures

Mixture identification: Epo Grout 3C Plus Comp. A

Hazardous components within the meaning of the CLP regulation and related classification:

Concentration (%w/w)	Name	Ident. Numb.	Classification	Registration Number
$\geq 10 - < 20 \%$	reaction product: bisphenol-A-(epichlorhydrin); epoxy resin	CAS:1675-54-3, 25068-38-6,	Skin Irrit. 2, H315 Skin Sens. 1, H317 Eye Irrit. 2, H319 Aquatic	01-2119456619-26
	(number average molecular weight ≤ 700)	25085-99-8 EC:216-823-5 Index:603-073-00-2	Chronic 2, H411 Specific Concentration Limits: C $\geq 5\%$: Skin Irrit. 2 H315 C $\geq 5\%$: Eye Irrit. 2 H319	
$\geq 2.5 - < 5 \%$	oxirane, mono[(C12-14-alkyloxy)methyl] derivs.	CAS:68609-97-2 EC:271-846-8 Index:603-103-00-4	Skin Irrit. 2, H315; Skin Sens. H317	01-2119485289-22-XXXX
$\geq 1 - < 2.5 \%$	Formaldehyde, oligomeric reaction products with 1-chloro-2,3- epoxypropane and phenol	CAS:9003-36-5 EC:500-006-8	Skin Irrit. 2, H315; Skin Sens. 1A, H317; Aquatic Chronic 2, H411	01-2119454392-40-XXXX

≥0.49 - <1 %	Reaction mass of Bis(1,2,2,6,6- pentamethyl-4-piperidyl) sebacate	CAS:1065336- 91-5	Skin Sens. 1A, H317; Aquatic and Methyl 1,2,2,6,6-pentamethyl-4-piperidyl- Acute 1, H400; Aquatic Chronic 1, H410; Repr. 2, H361f	01-2119491304-40-XXXX
≥0.49 - <1 %	free crystalline silica (Ø <10 µ)	CAS:14808-60-7 STOT RE 1, H372 EC:238-878-4	STOT RE 1, H372	
≥0.49 - <1 %	Phenol, styrenated	CAS:61788-44-1 EC:262-975-0	Aquatic Chronic 2, H411; Aquatic Acute 1, H400	01-2119979575-18-XXXX

► SECTION 4: First aid measures

4.1. Description of first aid measures

In case of skin contact:

Immediately take off all contaminated clothing.

Areas of the body that have - or are only even suspected of having - come into contact with the product must be rinsed immediately with plenty of running water and possibly with soap.

Wash thoroughly the body (shower or bath).

Remove contaminated clothing immediately and dispose of safely.

After contact with skin, wash immediately with soap and plenty of water.

In case of eyes contact:

After contact with the eyes, rinse with water with the eyelids open for a sufficient length of time, then consult an ophthalmologist immediately.

Protect uninjured eye.

In case of Ingestion:

Do not induce vomiting, get medical attention showing the SDS and the hazard label.

In case of Inhalation:

Remove casualty to fresh air and keep warm and at rest.

4.2. Most important symptoms and effects, both acute and delayed

Eye irritation

Eye damages

Skin Irritation

Erythema

4.3. Indication of any immediate medical attention and special treatment needed

In case of accident or unwellness, seek medical advice immediately (show directions for use or safety data sheet if possible). Treatment:

(see paragraph 4.1)

► SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media:

Water.

Carbon dioxide (CO2).

Extinguishing media which must not be used for safety reasons: None in particular.

5.2. Special hazards arising from the substance or mixture

Do not inhale explosion and combustion gases.

5.3. Advice for firefighters

Use suitable breathing apparatus

► SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Wear personal protection equipment. Remove persons to safety.

6.2. Environmental precautions

Do not allow to enter into soil/subsoil. Do not allow to enter into surface water or drains. Limit leakages with earth or sand.

6.3. Methods and material for containment and cleaning up

Suitable material for taking up: absorbing material, organic, sand Retain contaminated washing water and dispose it.

6.4. Reference to other sections

See also section 8 and 13

► SECTION 7: Handling and storage

7.1. Precautions for safe handling

Avoid contact with skin and eyes, inhalation of vapours and mists.

Don't use empty container before they have been cleaned.

Before making transfer operations, assure that there aren't any incompatible material residuals in the containers.

Contaminated clothing should be changed before entering eating areas.

Do not eat or drink while working.

See also section 8 for recommended protective equipment.

7.2. Conditions for safe storage, including any incompatibilities

Keep away from food, drink and feed.

Incompatible materials:

None in particular.

Instructions as regards storage premises: Adequately ventilated premises.

7.3. Specific end use(s)

Recommendation(s)

None in particular Industrial sector specific solutions:

None in particular

► SECTION 8: Exposure controls/personal protection

8.1. Control parameters

List of components with OEL value

	OEL Type	Country	Long Term mg/m3	Long Term ppm	Short Term mg/m3	Short Term ppm	Note
free crystalline silica (Ø <10 µ) CAS: 14808-60-7	National	SWEDEN	0.100				SWEDEN, respirable aerosol
	National	NORWAY	0.100				K: Chemi- cals to be treated as carcino- genic.
	NDS	POLAND	2.000				frakcja wdychalna
	NDS	POLAND	0.300				frakcja re- spirabilna
	National	DENMARK	0.3		0.600		DENMARK, inhalable aerosol inhalable aerosol
	National	DENMARK	0.100		0.200		DENMARK, respirable aerosol respirable aerosol
	ACGIH		0.025				(R), A2 - Pulm fi- brosis, lung cancer
	EU		0.025				A2 (R) - Pulm fi- brosis, lung cancer
	National	AUSTRIA	0.150				A*

	ACGIH		0.025				A2 - Sus- pected Human Carcino- gen;lung cancer;pul- monary fibrosis
	National	SWEDEN	0.1				
	National	FRANCE	0.1				
	National	SPAIN	0.05				
	National	DENMARK	0.3				
	National	FINLAND	0.05				
	National	PORTUGAL	0.025				
	National	NORWAY	0.3		0.9		
	National	BELGIUM	0.1				
	NDS	POLAND	0.1				
	NDS	NETHER- LANDS	0.075				
	National	CZECH REPUBLIC	0.1				
	National	HUNGARY	0.15				
	Malaysi a OEL	MALAYSIA	0.1				0.1 mg/ m3 TWA (respirable dust)
	National	ESTONIA	0.1				
	National	SLOVAKIA	0.1		0.5		
	National	SLOVENIA	0.1				
	National	BULGARIA	0.07				
	National	ROMANIA	0.1				
	National	LITHUANIA	0.1				
	National	CROATIA	0.1				
	National	ITALY	0.100				

Predicted No Effect Concentration (PNEC) values

	PNEC Limit	Exposure Route	Exposure Frequency Remark
oxirane, mono[(C12-14-alkyloxy)methyl] derivs. CAS: 68609-97-2	0,00072 mg/l	Marine water	
	0,0072 mg/l	Fresh Water	
	66,77 mg/kg	Freshwater sediments	
	6,677 mg/kg	Marine water sediments	
	31525 mg/kg	Soil	
	10 mg/l	Microorganisms in sewage treatments	
Formaldehyde, oligomeric reaction products with 1- chloro-2,3-epoxypropane and phenol CAS: 9003-36-5	10 mg/l	Microorganisms in sewage treatments	
	0,003 mg/l	Fresh Water	
	0,294 mg/kg	Freshwater sediments	
	0,0003 mg/l	Marine water	
	0,0294 mg/kg	Marine water sediments	
	0,237 mg/kg	Soil	
benzyl alcohol CAS: 100-51-6	1 mg/l	Fresh Water	
	0,1 mg/l	Marine water	
	5,27 mg/kg	Freshwater sediments	

	0,527 mg/kg	Marine water sediments	
	39 mg/l	Microorganisms in sewage treatments	
	0,45 mg/kg	Soil	
	2,3 mg/l	Intermittent release	

Derived No Effect Level. (DNEL)

	Worker Industry	Worker Professional	Consumer	Exposure Route	Exposure Frequency Remark
Reaction mass of Bis(1,2,2,6,6-pentamethyl-4-piperidyl) sebacate and Methyl 1,2,2,6,6-pentamethyl-4-piperidyl sebacate CAS: 1065336-91-5			0.18 mg/kg	Human Oral	Long Term, systemic effects
	1.27 mg/m3		0.31 mg/m3	Human Inhalation	Long Term, systemic effects
	1.8 mg/kg		0.9 mg/kg	Human Dermal	Long Term, systemic effects
Phenol, styrenated CAS: 61788-44-1	11.02 mg/m3		2.717 mg/m3	Human Inhalation	Long Term, systemic effects
	6.25 mg/kg		3.125 mg/kg	Human Dermal	Long Term, systemic effects
			1.562 mg/kg	Human Oral	Long Term, systemic effects

8.2. Exposure controls

Eye protection:

Use close fitting safety goggles, don't use eye lens.

Protection for skin:

Use clothing that provides comprehensive protection to the skin, e.g. cotton, rubber, PVC or viton.

Protection for hands:

Suitable materials for safety gloves; EN ISO 374:

Polychloroprene - CR: thickness $\geq 0,5\text{mm}$; breakthrough time $\geq 480\text{min}$. Nitrile rubber - NBR: thickness $\geq 0,35\text{mm}$;

breakthrough time $\geq 480\text{min}$. Butyl rubber - IIR: thickness $\geq 0,5\text{mm}$; breakthrough time $\geq 480\text{min}$.

Fluorinated rubber - FKM: thickness $\geq 0,4\text{mm}$; breakthrough time $\geq 480\text{min}$.

Neoprene gloves are suggested (0,5 mm) not recommended gloves: not waterproof gloves Respiratory protection:

Personal Protective Equipment should comply with relevant CE standards (as EN ISO 374 for gloves and EN ISO 166 for goggles), correctly maintained and stored. Consult the supplier to check the suitability of equipment against specific chemicals and for user information.

Respiratory protection must be used where exposure levels exceed workplace exposure limits. Refer to appropriate EN standards, like EN 136, 140, 143, 149, 14387 for information on selection and use of appropriate respiratory protection equipment.

In case of insufficient ventilation use mask with ABEKP filters (EN 14387).

Hygienic and Technical measures Not available

Appropriate engineering controls: Not available

► SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state: Liquid

Appearance: paste

Color: various

Odour: Characteristic

Odour threshold: Not available

Melting point / freezing point: Not available

Initial boiling point and boiling range: Not available

Flammability: N.A.
 Upper/lower flammability or explosive limits: Not available
 Flash point: Not available
 Auto-ignition temperature: Not available
 Decomposition temperature: Not available
 pH: Not available
 Viscosity: 2,000,000.00 cPs
 Kinematic viscosity: Not available
 Solubility in water: Insoluble
 Solubility in oil: soluble
 Partition coefficient (n-octanol/water): Not available
 Vapour pressure: 0.01
 Relative density: 1.65 g/cm³
 Vapour density: Not available
 Particle characteristics:
 Particle size: Not available

9.2. Other information

Miscibility: Not available
 Conductivity: Not available
 Explosive properties: ==
 No other relevant information

► SECTION 10: Stability and reactivity

10.1. Reactivity

Stable under normal conditions

10.2. Chemical stability

Stable under normal conditions

10.3. Possibility of hazardous reactions

None

10.4. Conditions to avoid

Stable under normal conditions.

10.5. Incompatible materials

None in particular.

10.6. Hazardous decomposition products

None.

► SECTION 11: Toxicological information

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

Toxicological information of the mixture:

a)	acute toxicity	Not classified Based on available data, the classification criteria are not met
b)	skin corrosion/irritation	The product is classified: Skin Irrit. 2(H315)
c)	serious eye damage/irritation	The product is classified: Eye Irrit. 2(H319)
d)	respiratory or skin sensitisation	The product is classified: Skin Sens. 1(H317)
e)	germ cell mutagenicity	Not classified Based on available data, the classification criteria are not met
f)	carcinogenicity	Not classified Based on available data, the classification criteria are not met
g)	reproductive toxicity	Not classified Based on available data, the classification criteria are not met
h)	STOT-single exposure	Not classified Based on available data, the classification criteria are not met
i)	STOT-repeated exposure	Not classified Based on available data, the classification criteria are not met
j)	aspiration hazard	Not classified Based on available data, the classification criteria are not met

Toxicological information on main components of the mixture:

reaction product: bisphenol-A- (epi-chlorhydrin); epoxy resin (number average molecular weight <= 700)	a) acute toxicity	LD50 Skin Rabbit = 20 mg/kg
		LD50 Oral Rat = 11300 µL/kg
		LD50 Skin Rabbit = 20000 mg/kg
oxirane, mono[(C12-14- alkyloxy) methyl] derivs.	a) acute toxicity	LD50 Oral Rat = 19200 mg/kg
		LD50 Skin Rabbit = 4000 mg/kg
Formaldehyde, oligomeric reaction products with 1- chloro-2,3-epoxy-propane and phenol	acute toxicity	LD50 Oral Rat > 5000 mg/kg
		LD50 Skin Rat > 2000 mg/kg
	STOT-repeated exposure	NOAEL Oral = 250 mg/kg
Reaction mass of Bis(1,2,2,6,6-pentamethyl-4-piperidyl) sebacate and Methyl 1,2,2,6,6-pentamethyl-4- piperidyl sebacate	a) acute toxicity	LD50 Oral Rat = 3230 mg/kg
		LD50 Skin Rat > 3170 mg/kg
free crystalline silica (Ø <10 µ)	a) acute toxicity	LD50 Oral Rat = 500 mg/kg
Phenol, styrenated	acute toxicity	LC50 Inhalation Vapour Mouse = 158.3 mg/l 4h LD50 Oral Rat > 2500 mg/kg LD50 Skin Rat > 2000 mg/kg LD50 Skin Rabbit > 7940 mg/kg LC50 Inhalation Rat > 2.5 mg/l 6h LD50 Oral Rat 2100 mg/kg

11.2. Information on hazard classes as defined in Regulation (EC) No 1272/2008**Endocrine disrupting properties:**

No endocrine disruptor substances present in concentration >= 0.1%

► SECTION 12: Ecological information**12.1. Toxicity**

Adopt good working practices, so that the product is not released into the environment. Eco-Toxicological Information: Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

List of Eco-Toxicological properties of the product

The product is classified: Aquatic Chronic 3(H412)

List of components with eco-toxicological properties

Component	Ident. Numb.	Ecotox Infos
oxirane, mono[(C12-14- alkyloxy) methyl] derivs.	CAS: 68609-97- 2 - EINECS: 271-846-8 - INDEX: 603-103-00-4	a) Aquatic acute toxicity : LC50 Fish > 100 mg/L 96h Aquatic acute toxicity : EL50 Daphnia = 7.2 mg/L 48h Aquatic acute toxicity : EC50 Algae = 843 mg/L 72h Aquatic chronic toxicity : NOEC Algae = 500 mg/L 72h
Formaldehyde, oligomeric reaction products with 1-chloro-2,3- epoxy-propane and phenol	CAS: 9003-36-5 - EINECS: 500-006-8	Aquatic acute toxicity : LC50 Fish = 5.7 mg/L 96h Aquatic acute toxicity : EC50 Daphnia = 2.55 mg/L 48h Aquatic acute toxicity : EC50 Algae = 1.8 mg/L 72h
Reaction mass of Bis(1,2,2,6,6- pentamethyl-4-piperidyl) sebacate and Methyl 1,2,2,6,6-pentamethyl-4-piperidyl sebacate	CAS: 1065336-91-5 - EINECS: 915-687-0	

		a) Aquatic acute toxicity : EC50 Algae = 1.68 mg/L 72h b) Aquatic chronic toxicity : NOEC Daphnia = 1 mg/L 21d
Phenol, styrenated	CAS: 61788-44-1 - EINECS: 262-975-0	Aquatic acute toxicity : EC50 Daphnia = 4.6 mg/L 48 Aquatic acute toxicity : EC50 Algae = 9.7 mg/L 72 Aquatic acute toxicity : LC50 Fish = 5.6 mg/L 96
		a) Aquatic acute toxicity : EC50 Algae <i>Desmodesmus subspicatus</i> = 1.3 mg/L 72h IUCLID

12.2. Persistence and degradability

List of components with eco-toxicological properties

Component	Persistence/Degradability:
oxirane, mono[(C12-14- alkyloxy)methyl] derivs	Readily biodegradable
Reaction mass of Bis(1,2,2,6,6- pentamethyl-4-piperidyl) sebacate and Methyl 1,2,2,6,6-pentamethyl- 4-piperidyl sebacate	Non-readily biodegradable

12.3. Bioaccumulative potential

Component	Bioaccumulation
oxirane, mono[(C12-14- alkyloxy)methyl] derivs.	Not bioaccumulative

12.4. Mobility in soil

N.A.

12.5. Results of PBT and vPvB assessment

No PBT, vPvB or endocrine disruptor substances present in concentration $\geq 0.1\%$.

12.6. Endocrine disrupting properties

No endocrine disruptor substances present in concentration $\geq 0.1\%$

12.7. Other adverse effects

Not available

► SECTION 13: Disposal considerations

13.1. Waste treatment methods

The generation of waste should be avoided or minimized wherever possible. Recover if possible.

A waste code (EWC) according to European List of Waste (LoW) cannot be specified, due to dependence on the usage.

Contact and send to an authorized waste disposal service.

Methods of disposal:

Disposal of this product, solutions, packaging and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements.

Dispose of surplus and nonrecyclable products via a licensed waste disposal contractor. Do not dispose of waste into sewers.

Hazardous waste: Yes Disposal considerations:

Do not allow to enter drains or watercourses.

Dispose of product according to all federal, state and local applicable regulations.

If this product is mixed with other wastes, the original waste product code may no longer apply and the appropriate code should be assigned.

Dispose of containers contaminated by the product in accordance with local or national legal provisions. For further information, contact your local waste authority.

Special precautions:

This material and its container must be disposed of in a safe way. Care should be taken when handling untreated empty containers. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.

Empty containers or liners may retain some product residues. Do not re-use empty containers..

► **SECTION 14: Transport information**

Not classified as dangerous in the meaning of transport regulations.

14.1. UN number or ID number

Not Applicable

14.2. UN proper shipping name

Not Applicable

14.3. Transport hazard class(es)

Not Applicable

14.4. Packing group

Not Applicable

14.5. Environmental hazards

Not Applicable

14.6. Special precautions for user

Not Applicable Road and Rail (ADR-RID) :

ADR-Hazard identification number: NA Not Applicable

Air (IATA) :

Not Applicable Sea (IMDG) :

Not Applicable

14.7. Maritime transport in bulk according to IMO instruments

Not Applicable

► **SECTION 15: Regulatory information**

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

VOC (2004/42/EC) : N.A. g/l

Dir. 98/24/EC (Risks related to chemical agents at work) Dir. 2000/39/EC (Occupational exposure limit values) Regulation (EC) n. 1907/2006 (REACH)

Regulation (EU) n. 2020/878 Regulation (EC) n. 1272/2008 (CLP)

Regulation (EC) n. 790/2009 (ATP 1 CLP) and (EU) n. 758/2013 Regulation (EU) n. 286/2011 (ATP 2 CLP)

Regulation (EU) n. 618/2012 (ATP 3 CLP) Regulation (EU) n. 487/2013 (ATP 4 CLP) Regulation (EU) n. 944/2013 (ATP 5 CLP)

Regulation (EU) n. 605/2014 (ATP 6 CLP) Regulation (EU) n. 2015/1221 (ATP 7 CLP) Regulation (EU) n. 2016/918 (ATP 8 CLP)

Regulation (EU) n. 2016/1179 (ATP 9 CLP) Regulation (EU) n. 2017/776 (ATP 10 CLP) Regulation (EU) n. 2018/669 (ATP 11 CLP)

Regulation (EU) n. 2019/521 (ATP 12 CLP) Regulation (EU) n. 2018/1480 (ATP 13 CLP) Regulation (EU) n. 2020/217 (ATP 14

CLP) Regulation (EU) n. 2020/1182 (ATP 15 CLP)

Provisions related to directive EU 2012/18 (Seveso III):

None

Restrictions related to the product or the substances contained according to Annex XVII Regulation (EC) 1907/2006 (REACH) and subsequent modifications:

Restrictions related to the product: 3

Restrictions related to the substances contained: 75

SVHC Substances:

SVHC substances not present in a concentration $\geq 0.1\%$ (w/w)

National regulations

Produktregisteret Norge: 52927

Produktregister Danmark: 4110777

MAL-kode: 00-5 (1993) A+B: 00-5 (1993)

German Water Hazard Class (WGK)

2

15.2. Chemical safety assessment

No Chemical Safety Assessment has been carried out for the mixture.

► **SECTION 16: Other information**

Code	Description
H315	Causes skin irritation
H317	May cause an allergic skin reaction

H319	Causes serious eye irritation	
H361f	Suspected of damaging fertility	
H372	Causes damage to organs through prolonged or repeated exposure	
H400	Very toxic to aquatic life	
H410	Very toxic to aquatic life with long lasting effects	
H411	Toxic to aquatic life with long lasting effects	
H412	Harmful to aquatic life with long lasting effects	
Code	Hazard class and hazard category	Description
3.2 /2	Skin Irrit. 2	Skin irritation, Category 2
3.3 /2	Eye Irrit. 2	Eye irritation, Category 2
3.4.2/1	Skin Sens. 1	Skin Sensitisation, Category 1
3.4.2/1A	Skin Sens. 1A	Skin Sensitisation, Category 1A
3.4.2/1B	Skin Sens. 1B	Skin Sensitisation, Category 1B
3.7/2	Repr. 2	Reproductive toxicity, Category 2
3.9/1	STOT RE 1	Specific target organ toxicity – repeated exposure, Category 1
4.1/A1	Aquatic Acute 1	Acute aquatic hazard, category 1
4.1/C1	Aquatic Chronic 1	Chronic (long term) aquatic hazard, category 1
4.1/C2	Aquatic Chronic 2	Chronic (long term) aquatic hazard, category 2
4.1/C3	Aquatic Chronic 3	Chronic (long term) aquatic hazard, category 3

Classification and procedure used to derive the classification for mixtures according to Regulation (EC) 1272/2008 [CLP]:

Classification according to Regulation (EC) Nr. 1272/2008	Classification procedure
3.2/2	Calculation method
3.3/2	Calculation method
3.4.2/1A	Calculation method
4.1/C3	Calculation method

If appropriate, specific provisions in relation to possible training for workers are mentioned in section 2. Any training related to safety in the workplace must in any case refer to a risk assessment that must be carried out by a company safety officer taking into account the specific operating and environmental conditions in which the products are used. This document was prepared by a competent person who has received appropriate training. Main bibliographic sources: ECDIN - Environmental Chemicals Data and Information Network - Joint Research Centre, Commission of the European Communities

SAX's DANGEROUS PROPERTIES OF INDUSTRIAL MATERIALS - Eight Edition - Van Nostrand Reinold

The information contained herein is based on our state of knowledge at the above-specified date. It refers solely to the product indicated and constitutes no guarantee of particular quality.

It is the duty of the user to ensure that this information is appropriate and complete with respect to the specific use intended. This SDS cancels and replaces any preceding release.

Legend to abbreviations and acronyms used in the safety data sheet:

ACGIH: American Conference of Governmental Industrial Hygienists

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

AND: European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways

ATE: Acute Toxicity Estimate

ATEmix: Acute toxicity Estimate (Mixtures)

BCF: Biological Concentration Factor

BEI: Biological Exposure Index

BOD: Biochemical Oxygen Demand

CAS: Chemical Abstracts Service (division of the American Chemical Society).

CAV: Poison Center

CE: European Community

CLP: Classification, Labeling, Packaging.

CMR: Carcinogenic, Mutagenic and Reprotoxic

COD: Chemical Oxygen Demand

COV: Volatile Organic Compound
 CSA: Chemical Safety Assessment
 CSR: Chemical Safety Report
 DMEL: Derived Minimal Effect Level
 DNEL: Derived No Effect Level.
 DPD: Dangerous Preparations Directive
 DSD: Dangerous Substances Directive
 EC50: Half Maximal Effective Concentration
 ECHA: European Chemicals Agency
 EINECS: European Inventory of Existing Commercial Chemical Substances.
 ES: Exposure Scenario
 GefStoffVO: Ordinance on Hazardous Substances, Germany.
 GHS: Globally Harmonized System of Classification and Labeling of Chemicals.
 IARC: International Agency for Research on Cancer
 IATA: International Air Transport Association.
 IATA-DGR: Dangerous Goods Regulation by the "International Air Transport Association" (IATA).
 IC50: half maximal inhibitory concentration
 ICAO: International Civil Aviation Organization.
 ICAO-TI: Technical Instructions by the "International Civil Aviation Organization" (ICAO).
 IMDG: International Maritime Code for Dangerous Goods.
 INCI: International Nomenclature of Cosmetic Ingredients.
 IRCCS: Scientific Institute for Research, Hospitalization and Health Care
 KAFH: KAFH
 KSt: Explosion coefficient.
 LC50: Lethal concentration, for 50 percent of test population.
 LD50: Lethal dose, for 50 percent of test population.
 LDLo: Leathal Dose Low
 N.A.: Not Applicable
 N/A: Not Applicable
 N/D: Not defined/ Not available
 NA: Not available
 NIOSH: National Institute for Occupational Safety and Health
 NOAEL: No Observed Adverse Effect Level
 OSHA: Occupational Safety and Health Administration.
 PBT: Persistent, Bioaccumulative and Toxic
 PGK: Packaging Instruction
 PNEC: Predicted No Effect Concentration.
 PSG: Passengers
 RID: Regulation Concerning the International Transport of Dangerous Goods by Rail.
 STEL: Short Term Exposure limit.
 STOT: Specific Target Organ Toxicity.
 TLV: Threshold Limiting Value.
 TWATLV: Threshold Limit Value for the Time Weighted Average 8 hour day. (ACGIH Standard).
 vPvB: Very Persistent, Very Bioaccumulative.
 WGK: German Water Hazard Class.