

Safety Data Sheet

EPORIP comp.A

Safety Data Sheet dated: 15/09/2023 - version 6



SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1. Product identifier

Mixture identification:

Trade name: EPORIP comp.A

Trade code: 901521

UFI: J3C0-70JR-500M-046J

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

Recommended use: Epoxy adhesive

Uses advised against: Data not available.

1.3. Details of the supplier of the safety data sheet

Company: MAPEI U.K. Ltd - Mapei House Steel Park Road

Halesowen - West Midlands B62 8HD

phone: +44(0)121 508 6970 - fax: +44(0)121 5086 960 - www.mapei.co.uk (office hour 8:30-17:30)

Responsible: sicurezza@mapei.it

1.4. Emergency telephone number

call NHS 111 or a doctor/OHES Environmental Ltd +44(0)333 333 9962

SECTION 2: Hazards identification



2.1. Classification of the substance or mixture

Regulation (EC) n. 1272/2008 (CLP)

Skin Irrit. 2 Causes skin irritation.

Eye Irrit. 2 Causes serious eye irritation.

Skin Sens. 1 May cause an allergic skin reaction.

Aquatic Chronic 2 Toxic to aquatic life with long lasting effects.

Adverse physicochemical, human health and environmental effects:

No other hazards

2.2. Label elements

Regulation (EC) No 1272/2008 (CLP):

Hazard pictograms and Signal Word



Warning

Hazard statements

H315 Causes skin irritation.

H317 May cause an allergic skin reaction.

H319 Causes serious eye irritation.

H411 Toxic 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.

P391 Collect spillage.

Special Provisions:

EUH208 Contains 1,6-Hexanediol Diglycidyl Ether. May produce an allergic reaction.

EUH208 Contains Formaldehyde, oligomeric reaction products with 1-chloro-2,3-epoxypropane and phenol. May

produce an allergic reaction.

EUH205 Contains epoxy constituents. May produce an allergic reaction.

Contains

bis-[4-(2,3-epoxipropoxy)phenyl]propane

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

Restricted to professional users.

2.3. Other hazards

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

Other Hazards: No other hazards

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: EPORIP comp.A

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

Qty	Name	Ident. Numb.	Classification	Registration Number
$\geq 25 - < 50$ %	bis-[4-(2,3-epoxipropoxy)phenyl]propane	CAS:1675-54-3, 25085-99-8 EC:216-823-5 Index:603-073-00-2	Skin Irrit. 2, H315 Skin Sens. 1, H317 Eye Irrit. 2, H319 Aquatic Chronic 2, H411 Specific Concentration Limits: C $\geq 5\%$: Skin Irrit. 2 H315 C $\geq 5\%$: Eye Irrit. 2 H319	01-2119456619-26-XXXX
$\geq 10 - < 20$ %	1,6-Hexanediol Diglycidyl Ether	CAS:933999-84-9, 16096-31-4 EC:618-939-5	Skin Irrit. 2, H315; Eye Irrit. 2, H319; Skin Sens. 1, H317; Aquatic Chronic 3, H412	01-2119463471-41-0005
$\geq 5 - < 10$ %	Formaldehyde, oligomeric reaction products with 1-chloro-2,3-epoxypropane and phenol	CAS:9003-36-5 EC:701-263-0	Skin Irrit. 2, H315; Aquatic Chronic 2, H411; Skin Sens. 1, H317	01-2119454392-40-XXXX
$\geq 0.25 - < 0.49$ %	ethylene glycol monobutyl ether	CAS:111-76-2 EC:203-905-0 Index:603-014-00-0	Acute Tox. 3, H331 Acute Tox. 4, H302 Skin Irrit. 2, H315 Eye Irrit. 2, H319 Acute Toxicity Estimate: ATE - Oral: 1200mg/kg bw	01-2119475108-36-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.
Burning produces heavy smoke.

5.3. Advice for firefighters

Use suitable breathing apparatus.
Collect contaminated fire extinguishing water separately. This must not be discharged into drains.
Move undamaged containers from immediate hazard area if it can be done safely.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

For non emergency personnel:

Wear personal protection equipment.
Remove persons to safety.
See protective measures under point 7 and 8.

For emergency responders:

Wear personal protection equipment.

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.
In case of gas escape or of entry into waterways, soil or drains, inform the responsible authorities.

6.3. Methods and material for containment and cleaning up

Suitable material for taking up: absorbing material, organic, sand
Wash with plenty of water.
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.

Advice on general occupational hygiene:

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

Community Occupational Exposure Limits (OEL)

	OEL Type	Country	Occupational Exposure Limit
ethylene glycol monobutyl ether CAS: 111-76-2	DFG	GERMANY	Short Term: Ceiling - 98 mg/m ³ - 20 ppm
	ACGIH		Long Term: 20 ppm A3 - Confirmed Animal Carcinogen with Unknown Relevance to Humans; eye and upper respiratory tract irritation;
	National	SWEDEN	Long Term: 50 mg/m ³ - 10 ppm
	National	FRANCE	Long Term: 49 mg/m ³ - 10 ppm; Short Term: 246 mg/m ³ - 50 ppm
	National	SPAIN	Long Term: 98 mg/m ³ - 20 ppm; Short Term: 245 mg/m ³ - 50 ppm
	National	GREECE	Long Term: 120 mg/m ³ - 25 ppm
	National	DENMARK	Long Term: 98 mg/m ³ - 20 ppm
	National	FINLAND	Long Term: 98 mg/m ³ - 20 ppm; Short Term: 250 mg/m ³ - 50 ppm
	National	GERMANY	Long Term: 49 mg/m ³ - 10 ppm
	National	PORTUGAL	Long Term: 98 mg/m ³ - 20 ppm; Short Term: 246 mg/m ³ - 50 ppm
	National	NORWAY	Long Term: 50 mg/m ³ - 10 ppm; Short Term: 75 mg/m ³ - 15 ppm
	National	BELGIUM	Long Term: 98 mg/m ³ - 20 ppm; Short Term: 246 mg/m ³ - 50 ppm
	NDS	POLAND	Long Term: 98 mg/m ³
	NDSCh	POLAND	Short Term: 200 mg/m ³
	CHE	SWITZERLAND	Short Term: 98 mg/m ³ - 20 ppm
	NDS	NETHERLANDS	Long Term: 100 mg/m ³ ; Short Term: 246 mg/m ³
	National	CZECH REPUBLIC	Long Term: 100 mg/m ³
	National	HUNGARY	Long Term: 98 mg/m ³ ; Short Term: 246 mg/m ³
	Malaysia OEL	MALAYSIA	Long Term: 96.7 mg/m ³ - 20 ppm Skin notation;
	National	ESTONIA	Long Term: 98 mg/m ³ - 20 ppm; Short Term: 246 mg/m ³ - 50 ppm
	National	LATVIA	Long Term: 98 mg/m ³ - 20 ppm; Short Term: 246 mg/m ³ - 50 ppm
	National	CZECH REPUBLIC	Short Term: Ceiling - 200 mg/m ³
	National	SLOVAKIA	Short Term: Ceiling - 246 mg/m ³
	National	SLOVAKIA	Long Term: 98 mg/m ³ - 20 ppm
	National	SLOVENIA	Long Term: 98 mg/m ³ - 20 ppm; Short Term: 245 mg/m ³ - 50 ppm
	National	UNITED KINGDOM	Long Term: 123 mg/m ³ - 25 ppm; Short Term: 246 mg/m ³ - 50 ppm
	National	BULGARIA	Long Term: 98 mg/m ³ - 20 ppm; Short Term: 246 mg/m ³ - 50 ppm
	National	ROMANIA	Long Term: 98 mg/m ³ - 20 ppm; Short Term: 246 mg/m ³ - 50 ppm
	TUR	TURKEY	Long Term: 98 mg/m ³ - 20 ppm; Short Term: 246 mg/m ³ - 50 ppm
	National	LITHUANIA	Long Term: 50 mg/m ³ - 10 ppm; Short Term: 100 mg/m ³ - 20 ppm
	National	CROATIA	Long Term: 98 mg/m ³ - 20 ppm; Short Term: 246 mg/m ³ - 50 ppm
	EU		Long Term: 98 mg/m ³ - 20 ppm; Short Term: 246 mg/m ³ - 50 ppm Behaviour Indicative Possibility of significant uptake through the skin;
	ACGIH		Long Term: 20 ppm A3 - Confirmed Animal Carcinogen with Unknown Relevance to Humans; eye and upper respiratory tract irritation

Malaysi a OEL	MALAYSIA	Long Term: 96.7 mg/m ³ - 20 ppm Skin notation
EU		Long Term: 98 mg/m ³ - 20 ppm; Short Term: 246 mg/m ³ - 50 ppm Behaviour Indicative Possibility of significant uptake through the skin
National	SLOVENIA	Long Term: 98 mg/m ³ - 20 ppm; Short Term: 246 mg/m ³ - 50 ppm

Biological limit values

ethylene glycol monobutyl ether
CAS: 111-76-2

Biological Indicator: Butoxyacetic acid (BAA); Sampling Period: End of turn
Value: 200 MGGCREAT; Medium: Urine

Predicted No Effect Concentration (PNEC) values

1,6-Hexanediol Diglycidyl Ether
CAS: 933999-84-9,
16096-31-4

Exposure Route: Microorganisms in sewage treatments; PNEC Limit: 1 mg/l

Exposure Route: Fresh Water; PNEC Limit: 0.0115 mg/l

Exposure Route: Freshwater sediments; PNEC Limit: 0.283 mg/kg

Exposure Route: Marine water; PNEC Limit: 0.00115 mg/l

Exposure Route: Marine water sediments; PNEC Limit: 0.0283 mg/kg

Exposure Route: Soil; PNEC Limit: 0.223 mg/kg

Formaldehyde, oligomeric reaction products with 1-chloro-2,3-epoxypropane and phenol
CAS: 9003-36-5

Exposure Route: Microorganisms in sewage treatments; PNEC Limit: 10 mg/l

Exposure Route: Fresh Water; PNEC Limit: 0.003 mg/l

Exposure Route: Freshwater sediments; PNEC Limit: 0.294 mg/kg

Exposure Route: Marine water; PNEC Limit: 0.0003 mg/l

Exposure Route: Marine water sediments; PNEC Limit: 0.0294 mg/kg

Exposure Route: Soil; PNEC Limit: 0.237 mg/kg

Derived No Effect Level (DNEL) values

1,6-Hexanediol Diglycidyl Ether
CAS: 933999-84-9,
16096-31-4

Exposure Route: Human Dermal; Exposure Frequency: Long Term, systemic effects
Worker Industry: 2.8 mg/kg

Exposure Route: Human Inhalation; Exposure Frequency: Long Term, systemic effects
Worker Industry: 4.9 mg/m³

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 $\geq 0,5$ mm; breakthrough time ≥ 480 min.

Nitrile rubber - NBR: thickness $\geq 0,35$ mm; breakthrough time ≥ 480 min.

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

Fluorinated rubber - FKM: thickness $\geq 0,4$ mm; breakthrough time ≥ 480 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:

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state: Liquid
Appearance: liquid
Color: Grey
Odour: Characteristic
Odour threshold: Not available
Melting point / freezing point: Not available
Initial boiling point and boiling range: Not available
Flammability: N.A.
Lower and upper explosion limit: Not available
Flash point: Not available
Auto-ignition temperature: Not available
Decomposition temperature: Not available
pH: Not Relevant
Viscosity: 20,000.00 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: 1.55 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 Preparation

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:

bis-[4-(2,3-epoxipropoxy)phenyl]propane	a) acute toxicity	LD50 Skin Rabbit = 20 mg/kg
		LD50 Oral Rat = 11300 µL/kg
1,6-Hexanediol Diglycidyl Ether	a) acute toxicity	LD50 Oral Rat = 3010 mg/kg
		LD50 Skin Rabbit > 4900 mg/kg
	i) STOT-repeated exposure	NOAEL Oral = 200 mg/kg NOAEL Inhalation = 16 mg/m ³
Formaldehyde, oligomeric reaction products with 1-chloro-2,3-epoxypropane and phenol	a) acute toxicity	LD50 Oral Rat > 5000 mg/kg
		LD50 Skin Rat > 2000 mg/kg
	i) STOT-repeated exposure	NOAEL Oral = 250 mg/kg
ethylene glycol monobutyl ether	a) acute toxicity	ATE - Oral : 1200 mg/kg bw LD50 Oral Guineapig = 1414 mg/kg

11.2. Information on other hazards

Endocrine disrupting properties:

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

SECTION 12: Ecological information

12.1. Toxicity

Adopt good working practices, so that the product is not released into the environment.

Eco-Toxicological Information:

Toxic 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 2(H411)

List of Eco-Toxicological properties of the components

Component	Ident. Numb.	Ecotox Data
bis-[4-(2,3-epoxipropoxy)phenyl]propane	CAS: 1675-54-3, 25085-99-8 - EINECS: 216-823-5 - INDEX: 603-073-00-2	a) Aquatic acute toxicity : LC50 Fish = 2 mg/L 96h
1,6-Hexanediol Diglycidyl Ether	CAS: 933999-84-9, 16096-31-4 - EINECS: 618-939-5	a) Aquatic acute toxicity : EC50 Daphnia = 1.8 mg/L 48h
		a) Aquatic acute toxicity : EC50 Daphnia = 47 mg/L 48h
		a) Aquatic acute toxicity : LC50 Fish = 30 mg/L 96h

a) Aquatic acute toxicity : EC50 Algae = 23.1 mg/L 48

a) Aquatic acute toxicity : LC50 Fish Oncorhynchus mykiss = 30 mg/L 96h
ECHA

Formaldehyde, oligomeric reaction products with 1-chloro-2,3-epoxypropane and phenol CAS: 9003-36-5
- EINECS: 701-263-0 a) Aquatic acute toxicity : LC50 Fish = 5.7 mg/L 96h

a) Aquatic acute toxicity : EC50 Daphnia = 2.55 mg/L 48h

a) Aquatic acute toxicity : EC50 Algae = 1.8 mg/L 72h

ethylene glycol monobutyl ether CAS: 111-76-2 - EINECS: 203-905-0 - INDEX: 603-014-00-0 a) Aquatic acute toxicity : LC50 Fish Lepomis macrochirus = 1490 mg/L 96h
EPA

a) Aquatic acute toxicity : EC50 Daphnia Daphnia magna > 1000 mg/L 48h
EPA

a) Aquatic acute toxicity : LC50 Fish Lepomis macrochirus = 2950 mg/L 96h
IUCLID

12.2. Persistence and degradability

N.A.

12.3. Bioaccumulative potential

N.A.

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

14.1. UN number or ID number

3082

14.2. UN proper shipping name

ADR-Shipping Name: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (epoxy resins)

IATA-Technical name: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (epoxy resins)

IMDG-Technical name: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (epoxy resins)

14.3. Transport hazard class(es)

ADR-Class: 9

IATA-Class: 9

IMDG-Class: 9

14.4. Packing group

ADR-Packing Group: III

IATA-Packing group: III

IMDG-Packing group: III

14.5. Environmental hazards

Marine pollutant: Yes

Environmental Pollutant: Yes

IMDG-EMS: F-A, S-F

14.6. Special precautions for user

Road and Rail (ADR-RID):

ADR exempt: No

ADR-Label: 9

ADR-Hazard identification number: 90

ADR-Special Provisions: 274 335 375 601

ADR-Transport category (Tunnel restriction code): 3 (-)

ADR-Limited Quantity threshold: 5 L

Air (IATA):

IATA-Passenger Aircraft: 964

IATA-Cargo Aircraft: 964

IATA-Label: 9

IATA-Subsidiary hazards: -

IATA-Erg: 9L

IATA-Special Provisions: A97 A158 A197

Sea (IMDG):

IMDG-Stowage Code: Category A

IMDG-Stowage Note: -

IMDG-Subsidiary hazards: -

IMDG-Special Provisions: 274 335 969

IMDG-EMS: F-A, S-F

14.7. Maritime transport in bulk according to IMO instruments

Not Applicable

These substances, when carried in single or combination packagings containing a net quantity per single or inner packaging of 5 l or less for liquids, or having a net mass per single or inner packaging of 5 kg or less for solids, are not subject to provisions of ADR, IMDG and IATA DGR.

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)
Regulation (EU) n. 2021/643 (ATP 16 CLP)
Regulation (EU) n. 2021/849 (ATP 17 CLP)
Regulation (EU) n. 2022/692 (ATP 18 CLP)

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

Seveso III category according to Annex 1, part 1

Product belongs to category: E2 200 Upper-tier threshold (tonnes) 500

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: 28, 29, 40, 75

SVHC Substances:

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

National regulations

Produktregisteret Norge: 52874

MAL-kode: 0-5; A+B (3:1)=3-5 (1993)

Lagerklasse (TRGS-510): 12 - Non-combustible liquids, that cannot be assigned to any of the aforementioned LGK

German Water Hazard Class.

Class 2: hazardous for water.

15.2. Chemical safety assessment

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

SECTION 16: Other information

Code	Description
H302	Harmful if swallowed.
H315	Causes skin irritation.
H317	May cause an allergic skin reaction.
H319	Causes serious eye irritation.
H331	Toxic if inhaled.
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
3.1/3/Inhal	Acute Tox. 3	Acute toxicity (inhalation), Category 3
3.1/4/Oral	Acute Tox. 4	Acute toxicity (oral), Category 4
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
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
Skin Irrit. 2, H315	Calculation method
Eye Irrit. 2, H319	Calculation method
Skin Sens. 1, H317	Calculation method
Aquatic Chronic 2, H411	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.

Paragraphs modified from the previous revision:

- SECTION 2: Hazards identification
- SECTION 3: Composition/information on ingredients
- SECTION 5: Firefighting measures
- SECTION 6: Accidental release measures
- SECTION 7: Handling and storage
- SECTION 8: Exposure controls/personal protection
- SECTION 11: Toxicological information
- SECTION 12: Ecological information
- SECTION 14: Transport information
- SECTION 15: Regulatory information
- SECTION 16: Other information