

Safety Data Sheet

ULTRACOAT HT 2K 60 PARTE A

Safety Data Sheet dated: 07/02/2023 - version 5



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

1.1. Product identifier

Mixture identification:

Trade name: ULTRACOAT HT 2K 60 PARTE A

Trade code: 9074407

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

Recommended use: Epoxy paint

Uses advised against: Not available

1.3. Details of the supplier of the safety data sheet

Company: MAPEI S.p.A. - Via Cafiero, 22 - 20158 Milano

Tel. +(39)02376731 (office hours) - Fax: +39-02-37673.214 - www.mapei.it

Responsible: sicurezza@mapei.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'emergenza, 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

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

Aquatic Acute 1 Very toxic to aquatic life.

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) No 1272/2008 (CLP):

Pictograms and Signal Words



Warning

Hazard statements

H400 Very toxic to aquatic life.

H412 Harmful to aquatic life with long lasting effects.

Precautionary statements

P273 Avoid release to the environment.

P391 Collect spillage.

P501 Dispose of contents/container in accordance with applicable regulations.

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

SECTION 3: Composition/information on ingredients

3.1. Substances

Not Relevant

3.2. Mixtures

Mixture identification: ULTRACOAT HT 2K 60 PARTE A

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

Qty	Name	Ident. Numb.	Classification	Registration Number
$\geq 1 - < 2.5$ %	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
$\geq 0.49 - < 1$ %	triethylamine	CAS:121-44-8 EC:204-469-4 Index:612-004-00-5	Flam. Liq. 2, H225 Skin Corr. 1A, H314 Acute Tox. 4, H302 Acute Tox. 4, H312 Acute Tox. 4, H332 Specific Concentration Limits: $1\% \leq C < 100\%$: STOT SE 3 H335	
$\geq 0.1 - < 0.25$ %	zinc pyrithione	CAS:13463-41-7 EC:236-671-3 Index:613-333-00-7	Acute Tox. 2, H330 Acute Tox. 3, H301 STOT RE 1, H372 Eye Dam. 1, H318 Aquatic Acute 1, H400 Aquatic Chronic 1, H410 Repr. 1B, H360, M-Chronic:10, M-Acute:1000 Acute Toxicity Estimate: ATE - Oral: 221mg/kg bw	

SECTION 4: First aid measures

4.1. Description of first aid measures

In case of skin contact:

Wash with plenty of water and soap.

In case of eyes contact:

Wash immediately with water.

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

Not available

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

Treatment:

Not available

(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

Community Occupational Exposure Limits (OEL)

	OEL Type	Country	Occupational Exposure Limit
ethylene glycol monobutyl ether CAS: 111-76-2	DFG	GERMANY	Ceiling - Short Term: 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/m3 - 20 ppm; Short Term: 246 mg/m3 - 50 ppm
NDS POLAND	Long Term: 98 mg/m3
NDSch POLAND	Short Term: 200 mg/m3
CHE SWITZERLAND	Short Term: 98 mg/m3 - 20 ppm
NDS NETHERLANDS	Long Term: 100 mg/m3; Short Term: 246 mg/m3
National CZECH REPUBLIC	Long Term: 100 mg/m3
National HUNGARY	Long Term: 98 mg/m3; Short Term: 246 mg/m3
Malaysia OEL	MALAYSIA Long Term: 96,7 mg/m3 - 20 ppm Skin notation;
National ESTONIA	Long Term: 98 mg/m3 - 20 ppm; Short Term: 246 mg/m3 - 50 ppm
National LATVIA	Long Term: 98 mg/m3 - 20 ppm; Short Term: 246 mg/m3 - 50 ppm
National CZECH REPUBLIC	Ceiling - Short Term: 200 mg/m3
National SLOVAKIA	Ceiling - Short Term: 246 mg/m3
National SLOVAKIA	Long Term: 98 mg/m3 - 20 ppm
National SLOVENIA	Long Term: 98 mg/m3 - 20 ppm; Short Term: 245 mg/m3 - 50 ppm
National UNITED KINGDOM	Long Term: 123 mg/m3 - 25 ppm; Short Term: 246 mg/m3 - 50 ppm
National BULGARIA	Long Term: 98 mg/m3 - 20 ppm; Short Term: 246 mg/m3 - 50 ppm
National ROMANIA	Long Term: 98 mg/m3 - 20 ppm; Short Term: 246 mg/m3 - 50 ppm
TUR TURKEY	Long Term: 98 mg/m3 - 20 ppm; Short Term: 246 mg/m3 - 50 ppm
National LITHUANIA	Long Term: 50 mg/m3 - 10 ppm; Short Term: 100 mg/m3 - 20 ppm
National CROATIA	Long Term: 98 mg/m3 - 20 ppm; Short Term: 246 mg/m3 - 50 ppm
EU	Long Term: 98 mg/m3 - 20 ppm; Short Term: 246 mg/m3 - 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
Malaysia OEL	MALAYSIA Long Term: 96,7 mg/m3 - 20 ppm Skin notation
EU	Long Term: 98 mg/m3 - 20 ppm; Short Term: 246 mg/m3 - 50 ppm Behaviour Indicative Possibility of significant uptake through the skin
National SLOVENIA	Long Term: 98 mg/m3 - 20 ppm; Short Term: 246 mg/m3 - 50 ppm
National SWEDEN	Long Term: 8 mg/m3 - 2 ppm; Short Term: 40 mg/m3 - 10 ppm SWEDEN, Short-term value, 15 minutes average value
National FINLAND	Short Term: 4,2 mg/m3 - 1 ppm FINLAND, hud
National NORWAY	Long Term: 8 mg/m3 - 2 ppm NORWAY, H
EU	Long Term: 8,4 mg/m3 - 2 ppm; Short Term: 12,6 mg/m3 - 3 ppm Skin
National NORWAY	Long Term: 4,1 mg/m3 - 1 ppm; Short Term: 8,2 mg/m3 - 2 ppm
ACGIH	Long Term: 0,5 ppm; Short Term: 1 ppm Skin, A4 - Visual impair, URT irr
DFG GERMANY	Ceiling - Short Term: 8,4 mg/m3 - 2 ppm
ACGIH	Long Term: 0,5 ppm; Short Term: 1 ppm A4 - Not Classifiable as a Human Carcinogen; Skin - potential significant contribution to overall exposure by the cutaneous route; visual impairment; upper respiratory tract irritation
National SWEDEN	Long Term: 4,2 mg/m3 - 1 ppm

triethylamine
CAS: 121-44-8

National FRANCE	Long Term: 4,2 mg/m ³ - 1 ppm; Short Term: 12,6 mg/m ³ - 3 ppm
National SPAIN	Long Term: 8,4 mg/m ³ - 2 ppm; Short Term: 12,6 mg/m ³ - 3 ppm
National GREECE	Long Term: 40 mg/m ³ - 10 ppm; Short Term: 60 mg/m ³ - 15 ppm
National DENMARK	Long Term: 4,1 mg/m ³ - 1 ppm
National FINLAND	Short Term: 4,2 mg/m ³ - 1 ppm
National GERMANY	Long Term: 4,2 mg/m ³ - 1 ppm
National PORTUGAL	Long Term: 8,4 mg/m ³ - 2 ppm; Short Term: 12,6 mg/m ³ - 3 ppm
National NORWAY	Long Term: 8 mg/m ³ - 2 ppm; Short Term: 16 mg/m ³ - 4 ppm
National BELGIUM	Long Term: 4,2 mg/m ³ - 1 ppm; Short Term: 12,6 mg/m ³ - 3 ppm
NDS POLAND	Long Term: 3 mg/m ³
NDSCh POLAND	Short Term: 9 mg/m ³
CHE SWITZERLAND	Short Term: 8,4 mg/m ³ - 2 ppm
NDS NETHERLANDS	Long Term: 4,2 mg/m ³ ; Short Term: 12,6 mg/m ³
National CZECH REPUBLIC	Long Term: 8 mg/m ³
National HUNGARY	Long Term: 8,4 mg/m ³ ; Short Term: 12,6 mg/m ³
Malaysi a OEL MALAYSIA	Long Term: 4,1 mg/m ³ - 1 ppm Skin notation
National ESTONIA	Long Term: 8,4 mg/m ³ - 2 ppm; Short Term: 12,6 mg/m ³ - 3 ppm
National LATVIA	Long Term: 8,4 mg/m ³ - 2 ppm; Short Term: 12,6 mg/m ³ - 3 ppm
National CZECH REPUBLIC	Ceiling - Short Term: 12 mg/m ³
National SLOVAKIA	Ceiling - Short Term: 12,6 mg/m ³
National SLOVAKIA	Long Term: 8,4 mg/m ³ - 2 ppm
National SLOVENIA	Long Term: 8,4 mg/m ³ - 2 ppm; Short Term: 12,6 mg/m ³ - 3 ppm
National UNITED KINGDOM	Long Term: 8 mg/m ³ - 2 ppm; Short Term: 17 mg/m ³ - 4 ppm
National BULGARIA	Long Term: 8,4 mg/m ³ - 2 ppm; Short Term: 12,6 mg/m ³ - 3 ppm
National ROMANIA	Long Term: 8,4 mg/m ³ - 2 ppm; Short Term: 12,6 mg/m ³ - 3 ppm
TUR TURKEY	Long Term: 8,4 mg/m ³ - 2 ppm; Short Term: 12,6 mg/m ³ - 3 ppm
National LITHUANIA	Long Term: 8,4 mg/m ³ - 2 ppm; Short Term: 12,6 mg/m ³ - 3 ppm
National CROATIA	Long Term: 8,4 mg/m ³ - 2 ppm; Short Term: 12,6 mg/m ³ - 3 ppm
EU	Long Term: 8,4 mg/m ³ - 2 ppm; Short Term: 12,6 mg/m ³ - 3 ppm Behaviour Indicative Possibility of significant uptake through the skin
National BELGIUM	Long Term: 2,07 mg/m ³ - 0,5 ppm; Short Term: 4,14 mg/m ³ - 1 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

8.2. Exposure controls

Eye protection:

Not needed for normal use. Anyway, operate according good working practices.

Protection for skin:

No special precaution must be adopted for normal use.

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.

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: Not available

Color: Translucent

Odour: Not available

Melting point / freezing point: Not available

Initial boiling point and boiling range: 100 °C (212 °F)

Flammability: N.A.

Upper/lower flammability or explosive limits: Not available

Flash point: 100 °C (212 °F)

Auto-ignition temperature: Not available

Decomposition temperature: Not available

pH: 8.50

Viscosity: Not available

Kinematic viscosity: Not available

Solubility in water: slightly soluble

Solubility in oil: Not available

Partition coefficient (n-octanol/water): Not available

Vapour pressure: Not available

Relative density: 1.05 g/cm³

Vapour density: Not available

Particle characteristics:

Particle size: Not available

9.2. Other information

Miscibility: Not available

Conductivity: Not available

Evaporation rate: > Butyl Acetate 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	Not classified
	Based on available data, the classification criteria are not met
c) serious eye damage/irritation	Not classified

	Based on available data, the classification criteria are not met
d) respiratory or skin sensitisation	Not classified
	Based on available data, the classification criteria are not met
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:

ethylene glycol monobutyl ether	a) acute toxicity	ATE - Oral : 1200 mg/kg bw LD50 Oral Guineapig = 1414, mg/kg
triethylamine	a) acute toxicity	LD50 Oral Rat = 460, mg/kg
zinc pyrithione	a) acute toxicity	ATE - Oral : 221 mg/kg bw LD50 Skin Rabbit = 100 mg/kg LD50 Oral Rat = 177 mg/kg LC50 Inhalation Rat 0,05 mg/l 4h LD50 Skin Rabbit = 100 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:

Very toxic to aquatic organisms.

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 Acute 1(H400), Aquatic Chronic 3(H412)

List of Eco-Toxicological properties of the components

Component	Ident. Numb.	Ecotox Data
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
triethylamine	CAS: 121-44-8 - EINECS: 204- 469-4 - INDEX: 612-004-00-5	a) Aquatic acute toxicity : EC50 Daphnia Daphnia magna = 200 mg/L 48h IUCLID
zinc pyrithione	CAS: 13463-41- 7 - EINECS:	G : LD50 Avian Colinus virginianus = 64 mg/kg NZ_CCID

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. (zinc pyrithione)

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

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

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-Label: 9

ADR-Hazard identification number: 90

ADR-Special Provisions: 274 335 375 601

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

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 A215

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

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	Lower-tier threshold (tonnes)	Upper-tier threshold (tonnes)
Product belongs to category: E1	100	200

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: 40, 75

SVHC Substances:

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

National regulations

Produktregister Danmark: 4380443

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
H225	Highly flammable liquid and vapour.
H301	Toxic if swallowed.
H302	Harmful if swallowed.
H312	Harmful in contact with skin.
H314	Causes severe skin burns and eye damage.
H315	Causes skin irritation.
H318	Causes serious eye damage.
H319	Causes serious eye irritation.
H330	Fatal if inhaled.
H331	Toxic if inhaled.
H332	Harmful if inhaled.
H335	May cause respiratory irritation.
H360	May damage fertility or the unborn child.
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.
H412	Harmful to aquatic life with long lasting effects.

Code	Hazard class and hazard category	Description
2.6/2	Flam. Liq. 2	Flammable liquid, Category 2
3.1/2/Inhal	Acute Tox. 2	Acute toxicity (inhalation), Category 2
3.1/3/Inhal	Acute Tox. 3	Acute toxicity (inhalation), Category 3
3.1/3/Oral	Acute Tox. 3	Acute toxicity (oral), Category 3
3.1/4/Dermal	Acute Tox. 4	Acute toxicity (dermal), Category 4
3.1/4/Inhal	Acute Tox. 4	Acute toxicity (inhalation), Category 4
3.1/4/Oral	Acute Tox. 4	Acute toxicity (oral), Category 4
3.2/1A	Skin Corr. 1A	Skin corrosion, Category 1A
3.2/2	Skin Irrit. 2	Skin irritation, Category 2
3.3/1	Eye Dam. 1	Serious eye damage, Category 1
3.3/2	Eye Irrit. 2	Eye irritation, Category 2
3.7/1B	Repr. 1B	Reproductive toxicity, Category 1B
3.8/3	STOT SE 3	Specific target organ toxicity — single exposure, Category 3
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/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
4.1/A1	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.

Paragraphs modified from the previous revision:

- SECTION 1: Identification of the substance/mixture and of the company/undertaking
- SECTION 2: Hazards identification
- SECTION 3: Composition/information on ingredients
- SECTION 8: Exposure controls/personal protection
- SECTION 9: Physical and chemical properties
- SECTION 11: Toxicological information
- SECTION 12: Ecological information
- SECTION 14: Transport information
- SECTION 15: Regulatory information
- SECTION 16: Other information