

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

1.1. Product identifier

Mixture identification:

Trade name: MAPECOAT I 620 W / B Trade code: 9016651 UFI: YJK0-80M8-T00N-JTW5

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

Recommended use: Hardener for epoxy products

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'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

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

Eye Dam. 1 Causes serious eye damage.

Skin Sens. 1 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



Hazard statements:

- H314 Causes severe skin burns and eye damage.
- H317 May cause an allergic skin reaction.
- H412 Harmful to aquatic life with long lasting effects.

Precautionary statements:

Print date	Ρ	ri	nt	da	ite
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P261	Avoid breathing mist/vapours/spray.
P273	Avoid release to the environment.
P280	Wear protective gloves/clothing and eye/face protection.
P301+P330+P331	IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.
P303+P361+P353	IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water [or shower].
P305+P351+P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

P310 Immediately call a POISON CENTER.

Contains:

polyoxypropylenediamine

3-aminomethyl-3,5,5trimethylcyclohexylamine

2,4,6-tris(dimethylaminomethyl)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 >= 0.1%.

Other Hazards: No other hazards

SECTION 3: Composition/information on ingredients

3.1. Substances

Not Relevant

3.2. Mixtures

Mixture identification: MAPECOAT I 620 W / B

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

Concentra tion (% w/w)	Name	Ident. Numb.	Classification	Registration Number
≥2.5 - <5 %	polyoxypropylenediamine	CAS:9046-10-0 EC:618-561-0	Acute Tox. 4, H312; Acute Tox. 4, H302; Skin Corr. 1B, H314; Aquatic Chronic 3, H412	
≥1 - <2.5 %	Phenol, styrenated	CAS:61788-44-1 EC:262-975-0	Aquatic Chronic 2, H411; Aquatic Acute 1, H400	01-2119979575-18-XXXX
≥1 - <2.5 %	3-aminomethyl-3,5,5- trimethylcyclohexylamine	CAS:2855-13-2 EC:220-666-8 Index:612-067- 00-9	Acute Tox. 4, H312; Acute Tox. 4, H302; Skin Corr. 1B, H314; Eye Dam. 1, H318; Skin Sens. 1, H317; Aquatic Chronic 3, H412	01-2119514687-32-xxxx
≥1 - <2.5 %	2,4,6- tris(dimethylaminomethyl)phenol	CAS:90-72-2 EC:202-013-9 Index:603-069- 00-0	Skin Corr. 1C, H314; Eye Dam. 1, H318; Acute Tox. 4, H302	01-2119560597-27-XXXX
≥0.1 - <0.25 %	dipropyleneglycol methyl ether	CAS:34590-94-8 EC:252-104-2	[1,3,OEL]	01-2119450011-60-xxxx

SECTION 4: First aid measures

4.1. Description of first aid measures

In case of skin contact:

Immediately take off all contaminated clothing.

OBTAIN IMMEDIATE MEDICAL ATTENTION.

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 opthalmologist 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	Ceiling	Long Term mg/m3	Long Term ppm	Short Term mg/m3	Short Term ppm	Behaviour	Note
dipropyleneglycol methyl ether	SUVA			300	50	300	50		
CAS: 34590-94-8									
	NDS			240					
	National			303	50	600	100		
	National			300	50	450	75		Short-term value, 15
									minutes average value
	National			310	50				hud
	National			300	50				Н
	NDSCh			480					
	EU			308	50				Skin
	ACGIH				100		150		Skin - Eye and URT irr, CNS impair
	DFG	GERMANY	С			310	50		
	ACGIH				100		150		Skin - potential significant contribution to overall exposure by the cutaneous route;CNS impairment;eye and upper respiratory tract irritation
	National	SWEDEN		300	50				
	National	FRANCE		308	50				
	National	SPAIN		308	50				
	National	GREECE		600	100	900	150		
	National	DENMARK		309	50				
	National	FINLAND		310	50				
	National	GERMANY		310	50				
	National	PORTUGAL		308	50		150		
	National	NORWAY		300	50	375	75		
	National	BELGIUM		308	50				
	NDS	POLAND		240					
	NDSCh	POLAND				480			
	CHE	SWITZERLAND				300	50		
	NDS	NETHERLANDS		300					
	National	CZECH REPUBLIC		270					
	National	HUNGARY		308					
	Malaysi a OEL	MALAYSIA		606	100				Skin notation
	National	ESTONIA		308	50				
	National			308	50				
	National		С			550			
	National	SLOVAKIA		308	50				
	National	SLOVENIA		308	50				
	National	UNITED KINGDOM		308	50	924	150		
	National	BULGARIA		308,0	50				
		ROMANIA		308	50				
	TUR	TURKEY		308	50				
		LITHUANIA		308	50	450	75		
	National	CROATIA		308	50				
	EU			308	50			Indicative	Possibility of significant
								_	uptake through the skin

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	PNEC Limit	Exposure Ro	oute E	Exposure Fro	equency Remark
Phenol, styrenated CAS: 61788-44-1	0,001 mg/l	Fresh Water			
	65778 mg/kg	Marine water sediments			
	65778 mg/kg	Freshwater sediments			
	0,17 mg/l	Microorganisr sewage treat			
	31525 mg/kg	Soil			
3-aminomethyl-3,5,5- trimethylcyclohexylamine CAS: 2855-13-2	0,06 mg/l	Fresh Water			
	0,006 mg/l	Marine water			
	0,23 mg/l	Intermittent	release		
	5,784 mg/kg	Freshwater sediments			
	0,578 mg/kg	Marine water sediments			
	1,121 mg/kg	Soil			
	3,18 mg/l	Microorganisr sewage treat			
dipropyleneglycol methyl ether CAS: 34590-94-8	19 mg/l	Fresh Water			
	1,9 mg/l	Marine water			
	70,2 mg/kg	Freshwater sediments			
	7,02 mg/kg	Marine water sediments			
	4168 mg/l	Microorganisr sewage treat			
	190 mg/l	Intermittent	release		
	2,74 mg/kg	Soil			
Derived No Effect Level	. (DNEL)				
	Worker Wo Industr Pro y ior		Exposu	re Route	Exposure Frequency Remark
Phenol, styrenated CAS: 61788-44-1	11,02 mg/m3	2,717 mg/m3		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

3-aminomethyl-3,5,5trimethylcyclohexylamine CAS: 2855-13-2 2,4,6tris (dimethylaminomethyl) phenol CAS: 90-72-2 effects dimethylaminomethyl) phenol

Print date

dipropyleneglycol methyl ether CAS: 34590-94-8	65 mg/kg	15 mg/kg	Human Dermal	Long Term, systemic effects
	310 mg/m3	37,2 mg/m3	Human Inhalation	Long Term, systemic effects
		1,67 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 >=0,5mm; breakthrough time >=480min.

Nitrile rubber - NBR: thickness >=0,35mm; breakthrough time >=480min.

Butyl rubber - IIR: thickness >=0,5mm; breakthrough time >=480min.

Fluorinated rubber - FKM: thickness >=0,4mm; breakthrough time >=480min.

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: liquid Color: white Odour: ammonia Odour threshold: 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: Not available Auto-ignition temperature: Not available Decomposition temperature: Not available pH: 10.00 Viscosity: 5,000.00 cPs Kinematic viscosity: Not available Solubility in water: dispersible Solubility in oil: partly soluble Partition coefficient (n-octanol/water): Not available Vapour pressure: Not available Relative density: 1.25 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

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Toxicological information of the mixture:
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 a) acute toxicity 	/	Not classified				
		Based on available data, the classification criteria are not me	et			
b) skin corrosio	n/irritation	The product is classified: Skin Corr. 1B(H314)				
c) serious eye d	amage/irritation	The product is classified: Eye Dam. 1(H318)				
d) respiratory o	r skin sensitisation	The product is classified: Skin Sens. 1(H317)				
e) germ cell mu	tagenicity	Not classified				
		Based on available data, the classification criteria are not me	et			
f) carcinogenicit	Σ γ	Not classified				
		Based on available data, the classification criteria are not me	et			
g) reproductive	toxicity	Not classified				
		Based on available data, the classification criteria are not me	et			
h) STOT-single	exposure	Not classified				
		Based on available data, the classification criteria are not me	et			
i) STOT-repeate	d exposure	Not classified				
		Based on available data, the classification criteria are not me	et			
j) aspiration haz	zard	Not classified	Not classified			
		Based on available data, the classification criteria are not met				
Toxicological informat	ion on main com	ponents of the mixture:				
Phenol, styrenated a) 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				
3-aminomethyl-3,5,5- trimethylcyclohexylamine	a) acute toxicity	LC50 Inhalation Dust Rat > 5,01 mg/l 4h				
		LD50 Oral Rat = 1030 mg/kg				
		LD50 Skin Rat > 2000 mg/kg				
		LD50 Oral Rat = 1030 mg/kg				
		LD50 Skin Rat > 2000 mg/kg				
2,4,6- tris (dimethylaminomethyl) phenol	a) acute toxicity	LD50 Oral Rat = 2169 mg/kg				
		LD50 Skin Rat > 1, ml/kg				
dipropyleneglycol methyl	a) acute toxicity	LD50 Oral Rat > 5000, mg/kg				
te 30/07/202	2 Production N	Name MAPECOAT I 620 W / B Pa	ge n.			

11.2 Information on other hazards

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-to	xicological prop	erties
Component	Ident. Numb.	Ecotox Infos
Phenol, styrenated	CAS: 61788-44- 1 - EINECS: 262-975-0	a) Aquatic acute toxicity : EC50 Daphnia = 4,6 mg/L 48
		a) Aquatic acute toxicity : EC50 Algae = 9,7 mg/L 72
		a) Aquatic acute toxicity : LC50 Fish = 5,6 mg/L 96
3-aminomethyl-3,5,5- trimethylcyclohexylamine	CAS: 2855-13-2 - EINECS: 220- 666-8 - INDEX: 612-067-00-9	a) Aquatic acute toxicity : LC50 Fish = 110 mg/L 96
		a) Aquatic acute toxicity : EC50 Daphnia = 23 mg/L 48
		a) Aquatic acute toxicity : EC50 Daphnia = 388 mg/L 48
		a) Aquatic acute toxicity : EC50 Algae > 50 mg/L 72
		b) Aquatic chronic toxicity : NOEC Daphnia = 3 mg/L - 21 d
		a) Aquatic acute toxicity: EC50 Daphnia Daphnia magna 14,6 mg/L 48h EPA
		a) Aquatic acute toxicity: EC50 Algae Desmodesmus subspicatus = 37 mg/L 72h IUCLID
2,4,6- tris(dimethylaminomethyl)phenol	CAS: 90-72-2 - EINECS: 202- 013-9 - INDEX: 603-069-00-0	a) Aquatic acute toxicity : LC50 Fish = 175 mg/L 96h
		a) Aquatic acute toxicity : EC50 Algae = 46,7 mg/L 72h
		a) Aquatic acute toxicity : NOEC Algae = 25,1 mg/L 72h
dipropyleneglycol methyl ether	CAS: 34590-94- 8 - EINECS: 252-104-2	a) Aquatic acute toxicity : LC50 Fish Pimephales promelas > 10000 mg/L 96h
		a) Aquatic acute toxicity: LC50 Daphnia Daphnia magna = 1919 mg/L 48h IUCLID

12.2. Persistence and degradability

Component

Persitence/Degradability:

dipropyleneglycol methyl ether Readily biodegradable

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 >= 0.1%.

12.6 Endocrine disrupting properties

No endocrine disruptor substances present in concentration >= 0.1%

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

2735

14.2. UN proper shipping name

ADR-Shipping Name: POLYAMINES, LIQUID, CORROSIVE, N.O.S. (polyoxypropylenediamine) IATA-Technical name: POLYAMINES, LIQUID, CORROSIVE, N.O.S. (polyoxypropylenediamine) IMDG-Technical name: POLYAMINES, LIQUID, CORROSIVE, N.O.S. (polyoxypropylenediamine)

14.3. Transport hazard class(es)

ADR-Class: 8

IATA-Class: 8

IMDG-Class: 8

14.4. Packing group

ADR-Packing Group: II IATA-Packing group: II IMDG-Packing group: II

14.5. Environmental hazards

Marine pollutant: No Environmental Pollutant: No IMDG-EMS: F-A, S-B

14.6. Special precautions for user

Road and Rail (ADR-RID) :

ADR-Label: 8

ADR-Hazard identification number: 80

ADR-Special Provisions: 274

ADR-Transport category (Tunnel restriction code): 2 (E)

Air (IATA):

IATA-Passenger Aircraft: 851

IATA-Cargo Aircraft: 855

IATA-Label: 8

IATA-Subsidiary hazards: -

IATA-Erg: 8L

IATA-Special Provisioning: A3 A803 Sea (IMDG) :

IMDG-Stowage Code: Category A IMDG-Stowage Note: SG35 IMDG-Subsidiary hazards: -

IMDG-Special Provisioning: 274 IMDG-EMS: F-A, S-B

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) : 50 (A+B) 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

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

German Water Hazard Class (WGK)

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.					
H312	Harmful in contact with skin.					
H314	Causes severe skin burns and eye damage.					
H317	May cause an allergic skin reaction.					
H318	Causes serious eye damage.					
H400	Very toxic to aquatic life.					
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					

3.1/4/Dermal	Acute Tox. 4	Acute toxicity (dermal), Category 4
3.1/4/Oral	Acute Tox. 4	Acute toxicity (oral), Category 4
3.2/1B	Skin Corr. 1B	Skin corrosion, Category 1B
3.2/1C	Skin Corr. 1C	Skin corrosion, Category 1C
3.3/1	Eye Dam. 1	Serious eye damage, Category 1
3.4.2/1	Skin Sens. 1	Skin Sensitisation, Category 1
4.1/A1	Aquatic Acute 1	Acute 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
3.2/1B	Calculation method
3.3/1	Calculation method
3.4.2/1	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.

* Sheet model entirely changed in compliance to regulatory update.