

Article Print da Versio	ate 20.02.20		.02.2023	EN Page 1 / 11
SECT	FION 1: Identification	on of the substance/mix	ture and of the com	pany/undertaking
	Product identifier			
	Article No. (manufact Trade name/designat		2 04500 N0000 epple-loc 4500-new Adhesive UFI: HN10-S0VN-4	
1.2.	Relevant identified u	uses of the substance or n	nixture and uses advis	sed against
	Relevant identified u Anaerobic-hardening	u ses: product for the screw lockin	g and surface seal	
	-	ier of the safety data sheet	-	
	supplier (manufactu	irer/importer/downstream	user/distributor)	
	E. Epple & Co. GmbH	1	T I I 40 70	
	Hertzstr. 8 71083 Herrenberg		Telephone: +49 703 Telefax: +49 7032 /	
	7 1000 Henenberg		www.epple-chemie.	
	Department response laboratory	sible for information:		
	E-mail (competent pe	erson)	labor@epple-chem	ie.de
	Emergency telephor			
	Information center ag	-	+49 (0) 228 / 19 24	0 (Advice in German)
SEC1	TION 2: Hazards ide	entification		
.1.	Classification of the	substance or mixture		*
		ding to Regulation (EC) No		
	The mixture is classif	ied as hazardous according	to regulation (EC) No 1	272/2008 [CLP].
	Skin Corr. 1A / H314 Eye Dam. 1 / H318 Skin Sens. 1 / H317 STOT SE 3 / H335	Skin corrosion/irri Serious eye dama Respiratory or ski STOT-single expo	age/eye irritation in sensitisation	Causes severe skin burns and eye damage. Causes serious eye damage. May cause an allergic skin reaction. May cause respiratory irritation.
.2.	Label elements			*
	The product is classif	fied and labelled according to	o EC directives or corre	sponding national laws.
	Labelling according	to Regulation (EC) No. 12	72/2008 [CLP]	
	Hazard pictograms			
		Danger		
	Hazard statements			
	H314 H317	Causes severe skin burns May cause an allergic skin		
	H335	May cause respiratory irrita		
	Precautionary state			
	P260	Do not breathe vapour.		
	P280 P301 + P330 + P331	Wear protective gloves. IF SWALLOWED: rinse mo	outh Do NOT induce vo	pmiting
	P304 + P340	IF INHALED: Remove pers	son to fresh air and kee	p comfortable for breathing.
	P333 + P313 P501	If skin irritation or rash occ		/attention. local/regional/ national/international regulations.
	Hazard components	•		เออลการฐางกลก กละเอกลกกระกาลเอกล์ กรุบเล่นอกร.
		methacrylic acid 2-hydroxyethyl methacryla	te	
		triethylene glycol dimethac		
	Supplemental hazar	d information		
		not applicable		



Article No.:	2 04500 N0000	epple-loc 4500-new
Print date	20.02.2023	Revision date 20.02.2023
Version	8.0	Issue date 20.02.2023

No information available.

SECTION 3: Composition/information on ingredients 3.2. Mixtures anaerobic one-part adhesive Description **Hazardous ingredients** Classification according to Regulation (EC) No 1272/2008 [CLP] **REACH No.** EC No. Designation CAS No. weight-% Index No. classification: // Remark 212-782-2 01-2119490169-29 868-77-9 2-hydroxyethyl methacrylate 49,9 - 74,9 Eye Irrit. 2 H319 / Skin Irrit. 2 H315 / Skin Sens. 1 H317 607-124-00-X 201-204-4 01-2119463884-26 79-41-4 methacrylic acid 2,4 - 9,9 607-088-00-5 Acute Tox. 4 H312 / Acute Tox. 4 H302 / Skin Corr. 1A H314 Specific concentration limit (SCL): STOT SE 3 H335 >= 1 203-652-6 01-2119969287-21 109-16-0 triethylene glycol dimethacrylate 2,4 - 9,9 Skin Sens. 1B H317 201-254-7 01-2119475796-19 a,a-dimethylbenzyl hydroperoxide 0,9 - 2,4 80-15-9 617-002-00-8 Org. Perox. E H242 / Acute Tox. 3 H331 / Acute Tox. 4 H312 / Acute Tox. 4 H302 / STOT RE 2 H373 / Skin Corr. 1B H314 / Aquatic Chronic 2 H411 Specific concentration limit (SCL): Skin Corr. 1B H314 >= 10 / Skin Irrit. 2 H315 >= 3 / Eye Dam. 1 H318 >= 3 / Eye Irrit. 2 H319 >= 1 / STOT SE 3 H335 >= 1 Acute toxicity estimate (ATE): ATE (oral): 382 mg/kg bw / ATE (inhalation, vapour): 1,37 mg/L

Additional information

Full text of classification: see section 16

SECTION 4: First aid measures

4.1. Description of first aid measures

General information

In all cases of doubt, or when symptoms persist, seek medical advice. In case of unconsciousness give nothing by mouth, place in recovery position and seek medical advice.

In case of inhalation

Remove casualty to fresh air and keep warm and at rest. In case of irregular breathing or respiratory arrest provide artificial respiration.

Following skin contact

Take off immediately all contaminated clothing. After contact with skin, wash immediately with plenty of water and soap. Do not use solvents or thinners.

After eye contact

Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Seek medical advice immediately.

Following ingestion

Seek medical advice immediately.

- 4.2. Most important symptoms and effects, both acute and delayed
 - In all cases of doubt, or when symptoms persist, seek medical advice.Dyspnoea
- 4.3. Indication of any immediate medical attention and special treatment needed First Aid, decontamination, treatment of symptoms.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media



Article No.:	2 04500 N0000	epple-loc 4500-new
Print date	20.02.2023	Revision date 20.02.2023
Version	8.0	Issue date 20.02.2023

alcohol resistant foam, carbon dioxide, Powder, spray mist, (water)

Unsuitable extinguishing media

strong water jet

5.2. Special hazards arising from the substance or mixture

Dense black smoke occurs during fire. Inhaling hazardous decomposing products can cause serious health damage.

5.3. Advice for firefighters

Provide a conveniently located respiratory protective device. Do not allow water used to extinguish fire to enter drains, ground or waterways. Cool closed containers that are near the source of the fire.

SECTION 6: Accidental release measures

6.1. **Personal precautions, protective equipment and emergency procedures** Keep away from sources of ignition. Ventilate affected area. Do not breathe vapours.

6.2. Environmental precautions

Do not allow to enter into surface water or drains. If the product contaminates lakes, rivers or sewages, inform competent authorities in accordance with local regulations.

6.3. Methods and material for containment and cleaning up

Isolate leaked material using non-flammable absorption agent (e.g. sand, earth, vermiculit, diatomaceous earth) and collect it for disposal in appropriate containers in accordance with the local regulations (see section 13). Clean using cleansing agents. Do not use solvents.

6.4. Reference to other sections

Observe protective provisions (see section 7 and 8).

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Advices on safe handling

Avoid contact with skin, eyes and clothes. When using do not eat, drink or smoke. Personal protection equipment: refer to section 8. Follow the legal protection and safety regulations.

Further information

Vapours are heavier than air. Vapours form explosive mixtures with air.

7.2. Conditions for safe storage, including any incompatibilities

Requirements for storage rooms and vessels

Storage in accordance with the Ordinance on Industrial Safety and Health (BetrSiVO). Keep container tightly closed. Do not empty containers with pressure - no pressure vessel! Smoking is forbidden. Access only for authorised persons. Store carefully closed containers upright to prevent any leaks.

Hints on joint storage

Keep away from strongly acidic and alkaline materials as well as oxidizers.

Further information on storage conditions

Take care of instructions on label. Store in a well-ventilated and dry room at temperatures between 5 °C and 30 °C. Protect from heat and direct sunlight. Keep container tightly closed. Remove all sources of ignition. Smoking is forbidden. Access only for authorised persons. Store carefully closed containers upright to prevent any leaks.

7.3. Specific end use(s)

Observe technical data sheet. Observe instructions for use.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Occupational exposure limit values

methacrylic acid Index No. 607-088-00-5 / EC No. 201-204-4 / CAS No. 79-41-4

TWA: 72 mg/m3; 20 ppm STEL: 143 mg/m3; 40 ppm

Additional information

TWA : Long-term occupational exposure limit value STEL : short-term occupational exposure limit value Ceiling : peak limitation



Article No.: Print date	epple-loc 4500-new Revision date 20.02.2023
Version	 Issue date 20.02.2023

DNEL: 2-hydroxyethyl methacrylate Index No. 607-124-00-X / EC No. 212-782-2 / CAS No. 868-77-9 DNEL long-term dermal (systemic), Workers: 1,3 mg/kg bw/day DNEL long-term inhalative (systemic), Workers: 4,9 mg/m³ a.a-dimethylbenzyl hydroperoxide Index No. 617-002-00-8 / EC No. 201-254-7 / CAS No. 80-15-9 DNEL long-term inhalative (systemic), Workers: 6 mg/m³ triethylene glycol dimethacrylate EC No. 203-652-6 / CAS No. 109-16-0 DNEL long-term dermal (systemic), Workers: 13,9 mg/kg bw/day DNEL long-term inhalative (systemic), Workers: 48,5 mg/m³ PNEC: 2-hydroxyethyl methacrylate Index No. 607-124-00-X / EC No. 212-782-2 / CAS No. 868-77-9 PNEC aquatic, freshwater: 0,482 mg/L PNEC aquatic, marine water: 0,482 mg/L PNEC aquatic, intermittent release: 1 mg/L PNEC sediment, freshwater: 3,79 mg/kg PNEC sediment, marine water: 3,79 mg/kg PNEC, soil: 0,476 mg/kg PNEC sewage treatment plant (STP): 10 mg/L a,a-dimethylbenzyl hydroperoxide Index No. 617-002-00-8 / EC No. 201-254-7 / CAS No. 80-15-9 PNEC aquatic, freshwater: 0,0031 mg/L PNEC aquatic, marine water: 0,0003 mg/L PNEC aquatic, intermittent release: 0,031 mg/L PNEC sediment, freshwater: 0,023 mg/kg PNEC sediment, marine water: 0,0023 mg/kg PNEC, soil: 0,0029 mg/kg

PNEC sewage treatment plant (STP): 0,35 mg/L

triethylene glycol dimethacrylate EC No. 203-652-6 / CAS No. 109-16-0 PNEC aquatic, freshwater: 0,164 mg/L PNEC aquatic, marine water: 0,0164 mg/L PNEC aquatic, intermittent release: 0,164 mg/L PNEC sediment, freshwater: 1,85 mg/kg PNEC sediment, marine water: 0,185 mg/kg PNEC, soil: 0,274 mg/kg PNEC sewage treatment plant (STP): 10 mg/L

8.2. Exposure controls

Provide good ventilation. This can be achieved with local or room suction. If this should not be sufficient to keep aerosol and solvent vapour concentration below the exposure limit values, a suitable respiratory protection must be used.

Personal protection equipment

Respiratory protection

If concentration of solvents is beyond the occupational exposure limit values, approved and suitable respiratory protection must be used. Observe the wear time limits according GefStoffV in combination with the rules for using respiratory protection apparatus (BGR 190). Use only respiratory protection equipment with CE-symbol including four digit test number.

Hand protection

For prolonged or repeated handling the following glove material must be used: NBR (Nitrile rubber)

Thickness of the glove material > 0,4 mm ; Breakthrough time: > 480 min.

Observe the instructions and details for use, storage, maintenance and replacement provided by the protective glove manufacturer. Penetration time of glove material depending on intensity and duration of exposure to skin. Recommended glove articles EN ISO 374

Barrier creams can help protecting exposed skin areas. In no case should they be used after contact.

Eye/face protection

Wear closely fitting protective glasses in case of splashes.



Article No.: Print date	2 04500 N0000	epple-loc 4500-new Revision date 20.02.2023
	20.02.2023	
Version	8.0	Issue date 20.02.2023

Body protection

Wear antistatic clothing of natural fibers (cotton) or heat resistant synthetic fibers.

Protective measures

After contact clean skin thoroughly with water and soap or use appropriate cleanser.

Environmental exposure controls

Do not allow to enter into surface water or drains. See section 7. No additional measures necessary.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

	A	Linuid
	Appearance: Colour:	Liquid green
		•
	Odour:	characteristic
	Odour threshold:	not applicable
	Melting point/freezing point:	-52 °C
		Source: triethylene glycol dimethacrylate
	Initial boiling point and boiling range:	not applicable
	Flammability:	Combustible liquid.
	Lower and upper explosion limit:	
	Lower explosion limit:	not applicable
	Upper explosion limit:	not applicable
	Flash point:	> 100 °C
	Auto-ignition temperature:	not applicable
	Decomposition temperature:	not applicable
	pH at 20 °C:	not relevant
	Cinematic viscosity (40°C):	564,81 mm²/s
	Viscosity at 20 °C:	520 - 700 mPa*s
	Solubility(ies):	
	Water solubility at 20 °C:	partially miscible
	Partition coefficient: n-octanol/water:	see section 12
	Vapour pressure at 20 °C:	not applicable
	Density and/or relative density:	
	Density at 20 °C:	1,08 g/cm³
	Relative vapour density:	not applicable
	particle characteristics:	not applicable
	Other information	
	Solid content:	100 weight-%
	solvent content:	
	Organic solvents:	0 weight-%
	Water:	0 weight-%
	Solvent separation test:	< 3 weight-% (ADR/RID)
<u></u>	FION 40: Stability and reactivity	

SECTION 10: Stability and reactivity

10.1. Reactivity

9.2.

No information available.

10.2. Chemical stability

Stable when applying the recommended regulations for storage and handling. Further information on correct storage: refer to section 7.Conditions to avoid Radiant heat.; UV-radiation/sunlight

10.3. Possibility of hazardous reactions

10.4. Conditions to avoid

Hazardous decomposition byproducts may form with exposure to high temperatures.



Page 6 / 11

Article No.:	2 04500 N0000	epple-loc 4500-new
Print date	20.02.2023	Revision date 20.02.2023
Version	8.0	Issue date 20.02.2023

10.5. Incompatible materials

not applicable

10.6. Hazardous decomposition products

Hazardous decomposition byproducts may form with exposure to high temperatures, e.g.: carbon dioxide, carbon monoxide, smoke, nitrogen oxides.

SECTION 11: Toxicological information

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

Acute toxicity

2-hydroxyethyl methacrylate oral, LD50, Rat: > 5000 mg/kg dermal, LD50, Rabbit: > 5000 mg/kg

α,α-dimethylbenzyl hydroperoxide
 oral, LD50, Rat: 382 mg/kg
 dermal, LD50, Rat 530 - 1060 mg/kg
 inhalative (vapours), LC50, Rat: 1,37 mg/L (4 h)

triethylene glycol dimethacrylate oral, LD50, Rat: 10837 mg/kg dermal, LD50, Mouse: > 2000 mg/kg

Skin corrosion/irritation; Serious eye damage/eye irritation

Causes severe skin burns and eye damage.

- 2-hydroxyethyl methacrylate eyes, Rabbit: Evaluation irritant. Method: Draize test
- α,α-dimethylbenzyl hydroperoxide Skin, Rabbit: Evaluation corrosive Method: Draize test

triethylene glycol dimethacrylate Skin, Rabbit (24 h): Evaluation non-irritant. Method: Draize test eyes, Rabbit: Evaluation non-irritant. Method: OECD 405

Respiratory or skin sensitisation

May cause an allergic skin reaction.

2-hydroxyethyl methacrylate Skin, Guinea pig: ; Evaluation sensitising

CMR effects (carcinogenicity, mutagenicity and toxicity for reproduction)

2-hydroxyethyl methacrylate Germ cell mutagenicity; Evaluation negative Method: OECD 471 (Ames test) Germ cell mutagenicity; Evaluation positive. Method: OECD 473. in-vitro Germ cell mutagenicity; Evaluation negative Method: OECD 476

α,α-dimethylbenzyl hydroperoxideGerm cell mutagenicity; Evaluation positiveMethod: OECD 471 (Ames test)

triethylene glycol dimethacrylate Germ cell mutagenicity; Evaluation negative Method: OECD 476 with and without metabolic activation Germ cell mutagenicity; Evaluation negative Method: OECD 471 (Ames test) with and without metabolic activation



Article No.:	2 04500 N0000	epple-loc 4500-new
Print date	20.02.2023	Revision date 20.02.2023
Version	8.0	Issue date 20.02.2023

STOT-single exposure; STOT-repeated exposure

May cause respiratory irritation.

2-hydroxyethyl methacrylate STOT-repeated exposure, NOAEL:, Rat: 100 mg/kg Method: OECD 422

triethylene glycol dimethacrylate STOT-repeated exposure, NOAEL:, Rat: 1000 mg/kg Method: OECD 422

Aspiration hazard

Based on available data, the classification criteria are not met.

Practical experience/human evidence

The fractions of acrylic resin in the preparation have an irritant effect.

Overall assessment on CMR properties

The ingredients in this mixture do not meet the criteria for classification as CMR category 1A or 1B according to CLP.

Remark

There is no information available on the preparation itself .

11.2. Information on other hazards

Endocrine disrupting properties

No information available.

SECTION 12: Ecological information

Classification according to Regulation (EC) No 1272/2008 [CLP] Do not allow to enter into surface water or drains.

12.1. Toxicity

2-hydroxyethyl methacrylate Fish toxicity, LC50, Pimephales promelas (fathead minnow): 227 mg/L (96 h) Method: OECD 202 Daphnia toxicity, EC50, Daphnia magna (Big water flea): 380 mg/L (48 h) Method: OECD 202 Algae toxicity, NOEC:, Pseudokirchneriella subcapitata: 400 mg/L (72 h) Method: OECD 201 Algae toxicity, EC50:, Pseudokirchneriella subcapitata: 836 mg/L (72 h) Method: OECD 201 Fish toxicity, LC50, Oryzias latipes (Ricefish): > 100 mg/L (96 h) Method: OECD 203 Bacteria toxicity, EC0, Pseudomonas fluorescens: > 3000 mg/L (16 h) a,a-dimethylbenzyl hydroperoxide Fish toxicity, LC50, Oncorhynchus mykiss (Rainbow trout): 3,9 mg/L (96 h) Method: OECD 203 Daphnia toxicity, EC50, Daphnia magna (Big water flea): 18,84 mg/L (48 h) Method: OECD 202 Algae toxicity, EC50, Pseudokirchneriella subcapitata: 3,1 mg/L (72 h) Method: OECD 201 Bacteria toxicity, EC10: 70 mg/L (30 min) triethylene glycol dimethacrylate Fish toxicity, LC50, Danio rerio (zebrafish): 16,4 mg/L (96 h) Method: OECD 203 Algae toxicity, EC50, Pseudokirchneriella subcapitata: > 1 mg/L (72 h) Method: OECD 201 Long-term Ecotoxicity

2-hydroxyethyl methacrylate Daphnia toxicity, NOEC, Daphnia magna (Big water flea): 24,1 mg/L (21 d) Method: OECD 211

α,α-dimethylbenzyl hydroperoxide Algae toxicity, NOEC, Desmodesmus subspicatus: 1 mg/L (72 h)



Article No.:	2 04500 N0000	epple-loc 4500-new
Print date	20.02.2023	Revision date 20.02.2023
Version	8.0	Issue date 20.02.2023

Method: OECD 201

triethylene glycol dimethacrylate Daphnia toxicity, NOEC, Daphnia magna (Big water flea): 32 mg/L (21 d) Method: OECD 211 Algae toxicity, NOEC, Pseudokirchneriella subcapitata: 18,6 mg/L (72 h) Method: OECD 201

12.2. Persistence and degradability

2-hydroxyethyl methacrylate Biodegradation: 92 - 100 % (14 d); Evaluation Readily biodegradable Method: OECD 301C

α,α-dimethylbenzyl hydroperoxide
 Biodegradation, aerobic.: 3 % (28 d); Evaluation Not readily biodegradable
 Method: OECD 301B

triethylene glycol dimethacrylate Biodegradation:, aerobic: 85 % (28 d); Evaluation Readily biodegradable Method: OECD 301B

12.3. Bioaccumulative potential

2-hydroxyethyl methacrylate Partition coefficient: n-octanol/water: 0,42 Method: OECD 107

α,α-dimethylbenzyl hydroperoxide Partition coefficient: n-octanol/water: 2,16

triethylene glycol dimethacrylate Partition coefficient: n-octanol/water: 2,3 Method: OECD 117

Bioconcentration factor (BCF)

α,α-dimethylbenzyl hydroperoxide Bioconcentration factor (BCF): 9,1 Method: OECD 305

12.4. Mobility in soil

Toxicological data are not available.

12.5. Results of PBT and vPvB assessment

The substances in the mixture do not meet the PBT/vPvB criteria according to REACH, annex XIII.

12.6. **Endocrine disrupting properties** No information available.

12.7. Other adverse effects

No information available.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Appropriate disposal / Product

Recommendation

Do not allow to enter into surface water or drains. This material and its container must be disposed of in a safe way. Waste disposal according to directive 2008/98/EC, covering waste and dangerous waste.

List of proposed waste codes/waste designations in accordance with EWC

080409* Waste adhesives and sealants containing organic solvents or other dangerous substances *Hazardous waste according to Directive 2008/98/EC (waste framework directive).

Appropriate disposal / Package

Recommendation

Non-contaminated packages may be recycled. Vessels not properly emptied are special waste.

SECTION 14: Transport information

14.1. UN number or ID number

UN 1760



Article Print c Versic	late	2 04500 N0000 20.02.2023 8.0	epple-loc 4500-new Revision date 20.02.2023 Issue date 20.02.2023	EN Page 9 / 11
	Land transp	oort (ADR/RID):	Corrosive liquid, n.o	
	Sea transpo	ort (IMDG):	(methacrylic acid, st CORROSIVE LIQUI	D, N.O.S.
	Air transpo	t (ICAO-TI / IATA-E	(methacrylic acid, st DGR): Corrosive liquid, n.o (methacrylic acid, st).S.
14.3.	Transport	hazard class(es)		,
			8	
14.4.	Packing gi	oup	П	
14.5.	Environme	ental hazards		
	Land trans	port (ADR/RID)	not applicable	
	Marine poll	. ,	not applicable	
14.6	-	ecautions for user		
14.0.				at persons transporting the product know what to do in
	case of an	accident or leakage safe handling: see	e.	
	Further inf	ormation		
	Land trans	port (ADR/RID)		
	Tunnel rest	riction code	E	
	Sea transp	ort (IMDG)		
	EmS-No.	. ,	F-A, S-B	
14.7.	Maritime ti	ansport in bulk ad	ccording to IMO instruments	
		rt as bulk according	•	
SEC	TION 15: R	egulatory inforn	nation	
		· ·		for the substance or mixture
	 Safety, health and environmental regulations/legislation specific for the substance or mixture EU legislation 			
	-	010/75/EU on indu	ustrial emissions [Industrial Emissior	ns Directive]
	National re	gulations		
	Restrictions of occupation Observe employment restrictions under the Maternity Protection Directive 92/85/EEC or stricter national regula applicable. Observe restrictions to employment for juveniles according to the 'juvenile work protection guideline' (94/33/EC) of			
	national reg	gulations, if applical	ble.	
	Substance/product listed in the following inventories: AICS no information DSL no information EHS no information IECSC no information KECI no information MITI no information NZLoC no information PICCS no information TCSI no information TSCA no information			
15.2.		Safety Assessmen		*
	EC No.	lowing substance Design	s of this mixture a chemical safety as ation	REACH No.
	CAS No.	Design		NEACH NO.



*

Article No.: Print date /ersion	2 04500 N0000 epple-loc 4500-new 20.02.2023 Revision date 20.02.2023 8.0 Issue date 20.02.2023		EN Page 10 / 11		
201-204-4 79-41-4	methac	rylic acid		01-2119463884-26	
203-652-6 109-16-0	triethyle	ene glycol dimethacrylate		01-2119969287-21	
201-254-7 α,α-di 80-15-9		ethylbenzyl hydroperoxide		01-2119475796-19	

SECTION 16: Other information

Full text of classification in section 3:				
			Causaa aariaya aya irritatian	
Eye Irrit. 2 / H319		Serious eye damage/eye irritation	Causes serious eye irritation. Causes skin irritation.	
Skin Irrit. 2 / H315		Skin corrosion/irritation	-	
Skin Sens. 1 / H317		Respiratory or skin sensitisation	May cause an allergic skin reaction.	
Acute Tox. 4 / H312		Acute toxicity (dermal)	Harmful in contact with skin.	
Acute Tox. 4 / H302		Acute toxicity (oral)	Harmful if swallowed.	
Skin Corr. 1A / H314		Skin corrosion/irritation	Causes severe skin burns and eye damage.	
Skin Sens. 1B / H317		Respiratory or skin sensitisation	May cause an allergic skin reaction.	
Org. Perox. E / H242		Organic peroxides	Heating may cause a fire.	
Acute Tox. 3 / H331		Acute toxicity (inhalative)	Toxic if inhaled.	
STOT RE 2 / H373		STOT-repeated exposure	May cause damage to organs (or state all	
			organs affected, if known) through prolonged or	
			repeated exposure (state route of exposure if it	
			is conclusively proven that no other routes of	
			exposure cause the hazard).	
Skin Corr. 1B / H314		Skin corrosion/irritation	Causes severe skin burns and eye damage.	
Aquatic Chronic 2 / H	411	Hazardous to the aquatic environment	Toxic to aquatic life with long lasting effects.	
Classification proce	dure			
Classification for mixt	ures and	used evaluation method according to re	gulation (EC) No 1272/2008 [CLP]	
Skin Corr. 1A		Skin corrosion/irritation	Calculation method.	
Eye Dam. 1		Serious eye damage/eye irritation	Calculation method.	
Skin Sens. 1		Respiratory or skin sensitisation	Calculation method.	
STOT SE 3		STOT-single exposure	Calculation method.	
Abbreviations and a	cronyms	6		
ADR			nal Carriage of Dangerous Goods by Road	
OEL		itional Exposure Limit Value		
BLV		cal Limit Value		
CAS	•	al Abstracts Service		
CLP	Classifi	cation, Labelling and Packaging		
CMR		genic, Mutagenic and Reprotoxic		
DIN		n Institute for Standardization / German i	ndustrial standard	
DNEL	Derived	No-Effect Level		
EAKV	Europea	an Waste Catalogue Directive		
EC	Effectiv	e Concentration		
EC	Europea	an Community		
EN		an Standard		
IATA-DGR	Internat	ional Air Transport Association – Dange	rous Goods Regulations	
IBC Code	Internat	tional Code for the Construction and Equ	ipment of Ships carrying Dangerous Chemicals in Bulk	
ICAO-TI	Internat	nternational Civil Aviation Organization Technical Instructions for the Safe Transport of Dangerous		
	Goods I	by Air		
IMDG Code	Internat	ional Maritime Code for Dangerous Goo	ds	
ISO	Internat	nternational Organization for Standardization		
LC	Lethal (Concentration		
LD	Lethal [Dose		
MARPOL	Maritim	e Pollution: The International Convention	n for the Prevention of Pollution from Ships	
OECD	Organis	ation for Economic Cooperation and De	velopment	
PBT	persiste	ent, bioaccumulative, toxic		
PNEC		ed No Effect Concentration		
REACH	Registra	ation, Evaluation, Authorisation and Res	triction of Chemicals	
RID	Regulat	tions concerning the International Carria	ge of Dangerous Goods by Rail	
UN	United I	Nations		
VOC		Organic Compounds		
vPvB	very pe	rsistent and very bioaccumulative		



Article No.:	2 04500 N0000	epple-loc 4500-new
Print date	20.02.2023	Revision date 20.02.2023
Version	8.0	Issue date 20.02.2023

Abbreviations and acronyms

n.a. = not applicable

n.b. = not determined

Further information

Classification according to Regulation (EC) No 1272/2008 [CLP]

The information supplied on this safety data sheet complies with our current level of knowledge as well as with national and EU regulations. Without written approval, the product must not be used for purposes different from those mentioned in section 1. It is always the user's duty to take any necessary measures for meeting the requirements laid down by local rules and regulations. The details in this safety data sheet describe the safety requirements of our product and are not to be regarded as guaranteed attributes of the product.

* Data changed compared with the previous version