

according to Regulation (EC) No 1907/2006

KEM HR (A)

Revision date: 25.09.2020

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

1.1. Product identifier

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UFI: RNPV-T0F0-F007-6R27

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

Use of the substance/mixture

Adhesive mortar for fastening elements A-component (resin), only professional use.

1.3. Details of the supplier of the safety data sheet

.o. Details of the supplier of the	<u>Details of the supplier of the safety data sheet</u>					
Company name: FRIULSIDER S.p.A.						
Street:	Via Trieste 1					
Place:	I-33048 San Giovanni al Natisone, Udine					
Telephone:	+(39) 0432 747911					
E-Mail:	environmental@friulsider.com; info@friulsider.com					
Internet:	www.friulsider.com					

1.4. Emergency telephone

CHEMTREC UK (London): +(44) 870 8200418

number:

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Regulation (EC) No. 1272/2008

Hazard categories: Respiratory or skin sensitisation: Skin Sens. 1 Hazardous Statements: May cause an allergic skin reaction.

2.2. Label elements

Regulation (EC) No. 1272/2008

Hazard components for labelling

Tetramethylene dimethacrylate; Ethylene dimethacrylate; Methacrylic acid, monoester with propane-1,2-diol; Reaction mass of 2,2'-[(4-methylphenyl)imino]bisethanol and Ethanol 2-[[2-(2-hydroxyethoxy)ethyl](4-methylphenyl)amino]

Signal word:

Pictograms:



Warning

Hazard statements

H317

May cause an allergic skin reaction.

Precautionary statements

P261	Avoid breathing vapours.
P280	Wear protective gloves.



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P333+P313	If skin irritation or rash occurs: Get medical advice / attention.
P362+P364	Take off contaminated clothing and wash it before reuse.

2.3. Other hazards

No information available.

SECTION 3: Composition/information on ingredients

3.2. Mixtures Hazardous

components

CAS No	Chemical name					
	EC No	Index No	REACH No			
	GHS Classification					
2082-81-7	Tetramethylene dimethacrylate			5 - < 15 %		
	218-218-1		01-2119967415-30			
	Skin Sens. 1B; H317					
25013-15-4	Vinyltoluene			1 - < 6 %		
	246-562-2		01-2119622074-50			
	Flam. Liq. 3, Acute Tox. 4, Skin	Irrit. 2, Eye Irrit. 2, Aquati	c Chronic 3; H226 H332 H315 H319 H412			
97-90-5	Ethylene dimethacrylate			1 - < 5 %		
	202-617-2	607-114-00-5	01-2119965172-38			
	Skin Sens. 1, STOT SE 3; H317	H335				
27813-02-1	Methacrylic acid, monoester with	n propane-1,2-diol		< 2,5 %		
	248-666-3		01-2119490226-37			
	Eye Irrit. 2, Skin Sens. 1; H319 H317					
6846-50-0	1-Isopropyl-2,2-dimethyltrimethy	lene Diisobutyrate		< 0,5 %		
	229-934-9		01-2119451093-47			
	Repr. 2, Aquatic Chronic 3; H361d H412					
-	Reaction mass of 2,2'-[(4-methylphenyl)imino]bisethanol and Ethanol 2-[[2-(2-hydroxyethoxy)ethyl](4-methylphenyl)amino]					
	911-490-9		01-2119979579-10			
	Acute Tox. 4, Skin Irrit. 2, Eye D	am. 1, Skin Sens. 1, Aqu	atic Chronic 3; H302 H315 H318 H317 H412			
38668-48-3	1,1'-(p-Tolylimino)dipropan-2-ol			< 0,5 %		
	254-075-1		01-2119980937-17			
	Acute Tox. 2, Eye Irrit. 2, Aquatic Chronic 3; H300 H319 H412					
130-15-4	1,4-naphthoquinone			< 0,05 %		
	204-977-6		01-2120760462-57			
	Acute Tox. 1, Acute Tox. 3, Skin Corr. 1C, Eye Irrit. 2, Skin Sens. 1, STOT SE 3, Aquatic Acute 1 (M-Factor = 10), Aquatic Chronic 1 (M-Factor = 1); H330 H301 H314 H319 H317 H335 H400 H410					

Full text of H and EUH statements: see section 16.

SECTION 4: First aid measures

4.1. Description of first aid measures

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General information

Take off immediately all contaminated clothing and wash it before reuse. Get medical advice/attention if you feel unwell.

After inhalation

Provide fresh air. When in doubt or if symptoms are observed, get medical advice.

After contact with skin

After contact with skin, wash immediately with plenty of water and soap. Take off immediately all contaminated clothing and wash it before reuse. Medical treatment necessary.

After contact with eyes

In case of contact with eyes flush immediately with plenty of flowing water for 10 to 15 minutes holding eyelids apart and consult an ophthalmologist. Remove contact lenses, if present and easy to do. Continue rinsing.

After ingestion

Do NOT induce vomiting. Rinse mouth thoroughly with water. Medical treatment necessary.

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

May cause an allergic skin reaction.

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

Treat symptomatically.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media

Foam Extinguishing powder Water spray jet Carbon dioxide (CO2)

Unsuitable extinguishing media

Full water jet

5.2. Special hazards arising from the substance or mixture

Pyrolysis products, toxic Carbon monoxide

5.3. Advice for firefighters

Wear a self-contained breathing apparatus and chemical protective clothing. Full protection suit. In case of fire and/or explosion do not breathe fumes.

Additional information

Suppress gases/vapours/mists with water spray jet. Collect contaminated fire extinguishing water separately. Do not allow entering drains or surface water.

SECTION 6: Accidental release measures

6.1. Personal precautions. protective equipment and emergency procedures

Use personal protective equipment as required. Provide adequate ventilation. Avoid contact with skin, eyes and clothes.

6.2. Environmental precautions

Avoid release to the environment. Do not allow to enter into surface water or drains.

6.3. Methods and material for containment and cleaning up

Collect spillage. Take up mechanically, placing in appropriate containers for disposal. Suitable material for taking up: Sand

Treat the recovered material as prescribed in the section on waste disposal.

Retain contaminated washing water and dispose it.



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6.4. Reference to other sections

Safe handling: see section 7 Personal protection equipment: see section 8 Disposal: see section 13

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Advice on safe handling

Use only outdoors or in a well-ventilated area. Wear personal protection equipment (refer to section 8). Avoid contact with skin, eyes and clothes. When using do not eat, drink or smoke. Wash hands thoroughly after handling. Take off contaminated clothing and wash it before reuse.

7.2. Conditions for safe storage. including any incompatibilities

Requirements for storage rooms and vessels

Keep container tightly closed. Store in a place accessible by authorized persons only. Keep only in the original container in a cool, well-ventilated place.

Hints on joint storage

Do not use for products which come into contact with the food stuffs.

Further information on storage conditions

storage temperature: 5 - 25°C

7.3. Specific end use(s)

Adhesive mortar for fastening elements A-component (resin)

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

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DNEL/DMEL values

CAS No	Substance			
DNEL type		Exposure route	Effect	Value
2082-81-7	Tetramethylene dimethacrylate			
Worker DNEL	., long-term	inhalation	systemic	14,5 mg/m ³
Worker DNEL	., long-term	dermal	systemic	4,2 mg/kg bw/day
Consumer DN	IEL, long-term	inhalation	systemic	4,3 mg/m ³
Consumer DN	IEL, long-term	dermal	systemic	2,5 mg/kg bw/day
Consumer DN	IEL, long-term	oral	systemic	2,5 mg/kg bw/day
25013-15-4	Vinyltoluene			
Worker DNEL	., long-term	inhalation	systemic	37 mg/m ³
Worker DNEL	., acute	inhalation	systemic	37 mg/m ³
Worker DNEL	., long-term	inhalation	local	37 mg/m ³
97-90-5	Ethylene dimethacrylate			
Worker DNEL	., long-term	inhalation	systemic	2,45 mg/m ³
Worker DNEL	., long-term	dermal	systemic	1,3 mg/kg bw/day
27813-02-1	Methacrylic acid, monoester with propane-1,2-diol			
Worker DNEL	., long-term	inhalation	systemic	14,7 mg/m ³
Worker DNEL	., long-term	dermal	systemic	4,2 mg/kg bw/day
Consumer DN	IEL, long-term	inhalation	systemic	8,8 mg/m³
Consumer DN	IEL, long-term	dermal	systemic	2,5 mg/kg bw/day
Consumer DN	IEL, long-term	oral	systemic	2,5 mg/kg bw/day
6846-50-0	1-Isopropyl-2,2-dimethyltrimethylene Diisobutyrate			
Worker DNEL	., long-term	dermal	systemic	5 mg/kg bw/day
Worker DNEL	., long-term	inhalation	systemic	17,62 mg/m ³
Consumer DN	IEL, long-term	inhalation	systemic	4,35 mg/m ³
Consumer DN	IEL, long-term	oral	systemic	5 mg/kg bw/day
Consumer DN	IEL, long-term	dermal	systemic	5 mg/kg bw/day
-	Reaction mass of 2,2'-[(4-methylphenyl)imino]bisethane 2-[[2-(2-hydroxyethoxy)ethyl](4-methylphenyl)amino]	ol and Ethanol		
Worker DNEL	, long-term	inhalation	systemic	9,8 mg/m³
Worker DNEL	, long-term	dermal	systemic	1,4 mg/kg bw/day
Consumer DN	IEL, long-term	inhalation	systemic	2,9 mg/m ³
Consumer DN	IEL, long-term	oral	systemic	0,83 mg/kg bw/day
Consumer DN	IEL, long-term	dermal	systemic	0,83 mg/kg bw/day
130-15-4	1,4-naphthoquinone			
Worker DNEL	., long-term	inhalation	systemic	0,033 mg/m ³

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PNEC values

CAS No	Substance	
Environmenta	al compartment	Value
2082-81-7	Tetramethylene dimethacrylate	
Freshwater		0,043 mg/l
Marine water		0,004 mg/l
Freshwater se	ediment	3,12 mg/kg
Marine sedim	ent	0,312 mg/kg
Micro-organis	sms in sewage treatment plants (STP)	2 mg/l
Soil		0,573 mg/kg
25013-15-4	Vinyltoluene	
Freshwater		0,05 mg/l
Marine water		0,002 mg/l
Freshwater se	ediment	0,684 mg/kg
Marine sedim	ent	0,684 mg/kg
Soil		0,133 mg/kg
97-90-5	Ethylene dimethacrylate	
Freshwater		0,139 mg/l
Marine water		0,014 mg/l
Marine water	(intermittent releases)	0,15 mg/l
Freshwater se	ediment	1,6 mg/kg
Marine sedim	ent	0,16 mg/kg
Micro-organis	sms in sewage treatment plants (STP)	57 mg/l
Soil		0,239 mg/kg
27813-02-1	Methacrylic acid, monoester with propane-1,2-diol	
Freshwater		0,904 mg/l
Marine water		0,904 mg/l
Freshwater se	ediment	6,28 mg/kg
Marine sedim	ient	6,28 mg/kg
Micro-organis	sms in sewage treatment plants (STP)	10 mg/l
Soil		0,727 mg/kg
6846-50-0	1-Isopropyl-2,2-dimethyltrimethylene Diisobutyrate	
Freshwater		0,014 mg/l
Marine water		0,001 mg/l
Freshwater se	ediment	5,29 mg/kg
Marine sedim	ient	0,529 mg/kg
Soil		1,05 mg/kg
-	Reaction mass of 2,2'-[(4-methylphenyl)imino]bisethanol and Ethanol 2-[[2-(2-hydroxyethoxy)ethyl](4-methylphenyl)amino]	
Freshwater		0,048 mg/l
Marine water		0,005 mg/l
Freshwater se	ediment	0,12 mg/kg
Marine sedim	ent	0,12 mg/kg

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Freshwater	26,1 mg/l
Marine water	2,61 mg/l
Freshwater sediment	321 mg/kg
Marine sediment	32,1 mg/kg
Micro-organisms in sewage treatment plants (STP)	0,172 mg/l
Soil	49 mg/kg

Additional advice on limit values

This mixture contains quartz filler which is firmly bound in the pasty component, and thus not freely available during use, so that a risk of dust inhalation is excluded. Exposure limit values for respirable dusts are not relevant for this product.

8.2. Exposure controls







Appropriate engineering controls

Provide adequate ventilation. If local exhaust ventilation is not possible or not sufficient, the entire working area must be ventilated by technical means.

Protective and hygiene measures

Take off contaminated clothing and wash it before reuse. Draw up and observe skin protection programme. Wash hands thoroughly after handling. When using do not eat, drink or smoke.

Eye/face protection

Wear eye protection/face protection. Wear safety glasses.

Hand protection

Disposable gloves Recommended material: NBR (Nitrile rubber) Breakthrough time: > 480 min Thickness of the glove material: > 0,2 mm DIN-/EN-Norms: EN 374

When handling with chemical substances, protective gloves must be worn with the CE-label including the four control digits. For special purposes, it is recommended to check the resistance to chemicals of the protective gloves mentioned above together with the supplier of these gloves.

Skin protection

Wear suitable protective clothing.

Respiratory protection

In case of inadequate ventilation wear respiratory protection. Respiratory protection with combination filter A1P2 (organic gases/vapors and particles) recommended.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state:	solid (pasty)	
Colour:	light beige	
Odour:	characteristic	
pH-Value:		not determined
Changes in the physical state		
Melting point:		not determined
Initial boiling point and boiling range:		not determined



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Flash point:	not applicable					
Flammability Solid: Gas:	not determined not applicable					
Lower explosion limits: Upper explosion limits:	not determined not determined					
Auto-ignition temperature Solid: Gas: Decomposition temperature:	not determined not applicable not determined					
Oxidizing properties Not oxidising.						
Vapour pressure:	not determined					
Density (at 20 °C):	1,72 g/cm³					
Water solubility:	The study does not need to be conducted because the substance is known to be insoluble in water.					
Solubility in other solvents not determined						
Partition coefficient:	not determined					
Vapour density:	not determined					
Evaporation rate:	not determined					
9.2. Other information						
Solid content:	not determined					
SECTION 10: Stability and reactivity						

10.1. Reactivity

No hazardous reaction when handled and stored according to provisions.

10.2. Chemical stability

The product is stable under storage at normal ambient temperatures.

10.3. Possibility of hazardous reactions

Response: Oxidising agent, strong

10.4. Conditions to avoid

Heat. Keep cool. Protect from sunlight.

10.5. Incompatible materials

No information available.

10.6. Hazardous decomposition products

No known hazardous decomposition products.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity

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



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CAS No	Chemical name							
	Exposure route	Dose		Species	Source	Method		
2082-81-7	7 Tetramethylene dimethacrylate							
	oral	LD50 mg/kg	10066	Rat				
	dermal	LD50 mg/kg	> 3000	Rabbit				
25013-15-4	Vinyltoluene							
	dermal	LD50 mg/kg	4585	Rabbit				
	inhalation vapour	ATE	11 mg/l					
	inhalation aerosol	ATE	1,5 mg/l					
97-90-5	Ethylene dimethacrylate					-		
	oral	LD50 mg/kg	8700	Rat				
	dermal	LD50 mg/kg	> 2000	Rat				
27813-02-1	Methacrylic acid, monoe	ester with pro	pane-1,2-di	iol				
	oral	LD50 mg/kg	> 2000	Rat				
	dermal	LD50 mg/kg	> 5000	Rabbit				
6846-50-0	1-Isopropyl-2,2-dimethyl	trimethylene	Diisobutyra	ite				
	oral	LD50 mg/kg	3200	Rat				
	dermal	LD50 mg/kg	18900	Guinea pig				
-	Reaction mass of 2,2'-[(2-[[2-(2-hydroxyethoxy)							
	oral	LD50	619 mg/kg	Rat				
38668-48-3	1,1'-(p-Tolylimino)diprop	an-2-ol						
	oral	LD50 200 mg/kg	> 25 - <	Rat		OECD 423		
	dermal	LD50 mg/kg	> 2000	Rat				
130-15-4	1,4-naphthoquinone							
	oral	LD50	124 mg/kg	Rat				
	inhalation vapour	ATE	0,5 mg/l					
	inhalation (4 h) aerosol	LC50	0,046 mg/l	Rat				

Irritation and corrosivity

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

Sensitising effects

May cause an allergic skin reaction. (Tetramethylene dimethacrylate; Ethylene dimethacrylate; Methacrylic acid, monoester with propane-1,2-diol; Reaction mass of 2,2'-[(4-methylphenyl)imino]bisethanol and Ethanol 2-[[2-(2-hydroxyethoxy)ethyl](4-methylphenyl)amino]; 1,4-naphthoquinone)

Carcinogenic/mutagenic/toxic effects for reproduction

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



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STOT-single exposure

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

STOT-repeated exposure

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

Aspiration hazard

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

Further information

The mixture is classified as hazardous according to regulation (EC) No 1272/2008 [CLP].

SECTION 12: Ecological information

<u>12.1.</u> Toxicity



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CAS No Chemical name Aquatic toxicity Dose [h] | [d] Species Source Method 2082-81-7 Tetramethylene dimethacrylate ErC50 Acute algae toxicity 9,79 mg/l 72 h NOEC Crustacea toxicity 5,09 mg/l 21 c 25013-15-4 Vinyltoluene Acute fish toxicity LC50 5,2 mg/l 96 h Acute algae toxicity ErC50 2,6 mg/l 72 ŀ EC50 48 h Daphnia magna (Big Acute crustacea toxicity 9,3 mg/l water flea) 97-90-5 Ethylene dimethacrylate 96 h Brachydanio rerio Acute fish toxicity LC50 15,95 mg/l (zebra-fish) 72 h Pseudokirchneriella ErC50 Acute algae toxicity 17,3 mg/l subcapitata EC50 Daphnia magna (Big Acute crustacea toxicity 44,9 mg/l 48 h water flea) Crustacea toxicity NOEC 13,2 mg/l 2 d 27813-02-1 Methacrylic acid, monoester with propane-1,2-diol Acute algae toxicity ErC50 > 97,2 72 h Pseudokirchneriella subcapitata mg/l EC50 Daphnia magna (Big Acute crustacea toxicity > 143 48 h mg/l water flea) NOEC Algae toxicity mg/l 6846-50-0 1-Isopropyl-2,2-dimethyltrimethylene Diisobutyrate Algae toxicity NOEC 2,25 mg/l 3 d Reaction mass of 2,2'-[(4-methylphenyl)imino]bisethanol and Ethanol 2-[[2-(2-hydroxyethoxy)ethyl](4-methylphenyl)amino] LC50 Acute fish toxicity > 100 96 h mg/l ErC50 Acute algae toxicity > 100 72 ŀ mg/l Acute crustacea toxicity EC50 48 mg/l 48 h 38668-48-3 1,1'-(p-Tolylimino)dipropan-2-ol LC50 96 h Brachydanio rerio Acute fish toxicity 17 mg/l (zebra-fish) Acute algae toxicity ErC50 245 mg/l 72 h Desmodesmus subspicatus EC50 Acute crustacea toxicity Daphnia magna (Big 28,8 mg/l 48 h water flea) Algae toxicity NOEC 57,8 mg/l 72 d Desmodesmus OECD 201 subspicatus 130-15-4 1,4-naphthoquinone LC50 96 h Oryzias latipes Acute fish toxicity 0,045 (Ricefish) mg/l Acute algae toxicity ErC50 0,011 72 ł mg/l



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Acute crustacea toxicity	EC50	0,026	48 h		
	mg/I				

12.2. Persistence and degradability

CAS No Chemical name						
Chemical name						
Method	Value	d	Source			
Evaluation						
Tetramethylene dimethacrylate						
OECD 310	84 %	28				
Vinyltoluene						
OECD 310	36,7 %	28				
Ethylene dimethacrylate						
OECD 301D	71 %	28				
Methacrylic acid, monoester with propane-1,2-diol						
OECD 301C	81%	28				
1,4-naphthoquinone						
	39 %	5				
	Evaluation Tetramethylene dimethacrylate OECD 310 Vinyltoluene OECD 310 Ethylene dimethacrylate OECD 301D Methacrylic acid, monoester with propane-1,2-diol OECD 301C	Method Value Evaluation Evaluation Tetramethylene dimethacrylate 84 % OECD 310 84 % Vinyltoluene 36,7 % Ethylene dimethacrylate 71 % OECD 301D 71 % Methacrylic acid, monoester with propane-1,2-diol 81% 1,4-naphthoquinone 1	Method Value d Evaluation Evaluation Tetramethylene dimethacrylate 84 % 28 OECD 310 84 % 28 Vinyltoluene 36,7 % 28 Ethylene dimethacrylate 71 % 28 OECD 301D 71 % 28 Methacrylic acid, monoester with propane-1,2-diol 81% 28 1,4-naphthoquinone 28			

12.3. Bioaccumulative potential

The product has not been tested.

Partition coefficient n-octanol/water

CAS No	Chemical name	Log Pow	
2082-81-7	Tetramethylene dimethacrylate	3,1	
25013-15-4	Vinyltoluene	3,35	
97-90-5	Ethylene dimethacrylate	2,4	
27813-02-1	Methacrylic acid, monoester with propane-1,2-diol	0,97	
6846-50-0	1-Isopropyl-2,2-dimethyltrimethylene Diisobutyrate	4,91	
-	Reaction mass of 2,2'-[(4-methylphenyl)imino]bisethanol and Ethanol 2-[[2-(2-hydroxyethoxy)ethyl](4-methylphenyl)amino]	2,17	
38668-48-3	1,1'-(p-Tolylimino)dipropan-2-ol	2,1	
130-15-4	1,4-naphthoquinone	1,77	

BCF

CAS No	Chemical name	BCF	Species	Source
25013-15-4	Vinyltoluene	100 - 320		

12.4. Mobility in soil

The product has not been tested.

12.5. Results of PBT and vPvB assessment

The product has not been tested.

12.6. Other adverse effects

No information available.

Further information

Do not allow to enter into surface water or drains. Do not allow to enter into soil/subsoil.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Disposal recommendations

Subsequent waste code numbers of the European Waste Catalogue are considered as recommendations. Dispose of waste according to applicable legislation. Do not allow to enter into surface water or drains. Do not



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allow to enter into soil/subsoil.

List of Wastes Code - residues/unused products

080409 WASTES FROM THE MANUFACTURE, FORMULATION, SUPPLY AND USE (MFSU) OF COATINGS (PAINTS, VARNISHES AND VITREOUS ENAMELS), ADHESIVES, SEALANTS AND PRINTING INKS; wastes from MFSU of adhesives and sealants (including waterproofing products); waste adhesives and sealants containing organic solvents or other hazardous substances; hazardous waste

List of Wastes Code - used product

080409 WASTES FROM THE MANUFACTURE, FORMULATION, SUPPLY AND USE (MFSU) OF COATINGS (PAINTS, VARNISHES AND VITREOUS ENAMELS), ADHESIVES, SEALANTS AND PRINTING INKS; wastes from MFSU of adhesives and sealants (including waterproofing products); waste adhesives and sealants containing organic solvents or other hazardous substances; hazardous waste

List of Wastes Code - contaminated packaging

150110 WASTE PACKAGING; ABSORBENTS, WIPING CLOTHS, FILTER MATERIALS AND PROTECTIVE CLOTHING NOT OTHERWISE SPECIFIED; packaging (including separately collected municipal packaging waste); packaging containing residues of or contaminated by hazardous substances; hazardous waste

No dangerous good in sense of this transport regulation.

No dangerous good in sense of this transport regulation.

No dangerous good in sense of this transport regulation.

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No dangerous good in sense of this transport regulation.

SECTION 14: Transport information

Land transport (ADR/RID)

14.1. UN number:

14.2. UN proper shipping name: 14.3. Transport hazard class(es): 14.4. Packing group:

Inland waterways transport (ADN)

14.1. UN number:

14.2. UN proper shipping name: 14.3. Transport hazard class(es):

14.4. Packing group:

Marine transport (IMDG)

<u>14.1. UN number:</u>

14.2. UN proper shipping name:

14.3. Transport hazard class(es):

14.4. Packing group:

Air transport (ICAO-TI/IATA-DGR)

14.1. UN number:

14.2. UN proper shipping name:

14.3. Transport hazard class(es):

14.4. Packing group:

14.5. Environmental hazards

ENVIRONMENTALLY HAZARDOUS: no

<u>14.6.</u> Special precautions for user No information available.

<u>14.7.</u> Transport in bulk according to Annex II of Marpol and the IBC Code not applicable

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SECTION 15: Regulatory information

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

EU regulatory information

Information according to 2012/18/EU Not subject to 2012/18/EU (SEVESO III) (SEVESO III):

Additional information

VOC content: 2,8 % (DIN EN ISO 11890-2)

To follow: 850/2004/EC , 79/117/EEC , 689/2008/EC

National regulatory information

Employment restrictions:

Water hazard class (D): Skin resorption/Sensitization: Observe restrictions to employment for juveniles according to the 'juvenile work protection guideline' (94/33/EC). 2 - obviously hazardous to water Causes allergic hypersensitivity reactions.

SECTION 16: Other information

Abbreviations and acronyms

ADN: Accord européen relativ au transport international des marchandises Dangereuses par voie de Navigation (European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways) ADR: Accord européen sur le transport des marchandises dangereuses par route (European Agreement concerning the International Carriage of Dangerous Goods by Road) CAS: Chemical Abstracts Service CLP: Classification, Labeling and Packaging DMEL: Derived Minimal Effect level **DNEL: Derived No Effect Level** EC50: Effective concentration, 50% ErC50: EC50 in terms of reduction of growth rate IATA: International Air Transport Association IATA-DGR: Dangerous Goods Regulations (DRG) for the air transport (IATA) IMDG: International Maritime Code for Dangerous Goods LC50: Lethal concentration, 50% LD50: Lethal dose, 50% NOEC: No Observed Effect Concentration OECD: Oragnisation for Economic Co-operation and Development PBT: persistent, bioaccumulative and toxic vPvB: very persistent and very bioaccumulative **PNEC: Predicted No Effect Concentration** REACH: Registration, Evaluation, Authorisation and Restriction of Chemicals RID: Règlement concernant le transport international ferroviaire de marchandises dangereuses (Regulations Concerning the International Carriage of Dangerous Goods by Rail) VOC: Volatile organic compound Acute Tox. 3: Acute toxicity, Category 3 Acute Tox. 2: Acute toxicity, Category 2 Acute Tox. 4: Acute toxicity, Category 4 Aquatic Acute 1: Acute aquatic hazard, Category 1 Aquatic Chronic 1: Long-term aquatic hazard, Category 1 Aquatic Chronic 3: Long-term aquatic hazard, Category 3 Asp. Tox. 1: Aspiration hazard, Category 1 Eye Dam. 1: Serious eye damage/eye irritation, Category 1 Eye Irrit. 2: Serious eye damage/eye irritation, Category 2

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Flam. Liq. 3: Flammable liquid, Category 3 Repr. 2: Reproductive toxicity, Category 2 Skin Corr. 1C: Skin corrosion/irritation, Category 1C Skin Irrit. 2: Serious eye damage/eye irritation, Category 2 Skin Sens. 1A: Skin sensitilization, Category 1A Skin Sens. 1B: Skin sensitilization, Category 1B STOT SE 3: Specific target organ toxicity (single exposure), Category 3

Classification for mixtures and used evaluation method according to Regulation (EC) No. 1272/2008 [CLP]

Classification Classification procedure			
Skin Sens. 1; H317	Calculation method		
Relevant H and EL	JH statements (number and full text)		
H226	Flammable liquid and vapour.		
H300	Fatal if swallowed.		
H301	Toxic if swallowed.		
H302	Harmful if swallowed.		
H314	Causes severe skin burns and eye damage.		
H315	Causes skin irritation.		
H317	May cause an allergic skin reaction.		
H318	Causes serious eye damage.		
H319	Causes serious eye irritation.		
H330	Fatal if inhaled.		
H332	Harmful if inhaled.		
H335	May cause respiratory irritation.		
H361d	Suspected of damaging the unborn child.		
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.		

Further Information

The above information describes exclusively the safety requirements of the product and is based on our present-day knowledge. The information is intended to give you advice about the safe handling of the product named in this safety data sheet, for storage, processing, transport and disposal. The information cannot be transferred to other products. In the case of mixing the product with other products or in the case of processing, the information on this safety data sheet is not necessarily valid for the new made-up material.

(The data for the hazardous ingredients were taken respectively from the last version of the sub-contractor's safety data sheet.)



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

1.1. Product identifier

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UFI: AQPV-A04D-R00R-V2N9

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

Use of the substance/mixture

compound mortar B-component (hardener), only professional use.

Uses advised against

no restriction

1.3. Details of the supplier of the safety data sheet

Company name:	FRIULSIDER S.p.A.
Street:	Via Trieste 1
Place:	I-33048 San Giovanni al Natisone, Udine
Telephone:	+(39) 0432 747911
E-Mail:	environmental@friulsider.com; info@friulsider.com
Internet:	www.friulsider.com

1.4. Emergency telephone number:

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Regulation (EC) No. 1272/2008

Hazard categories: Serious eve damage/eye irritation: Eye Irrit. 2 Respiratory or skin sensitisation: Skin Sens. 1 Hazard Statements: Causes serious eye irritation. May cause an allergic skin reaction.

2.2. Label elements

Regulation (EC) No. 1272/2008

Hazard components for labelling Dibenzoyl peroxide

Signal word:

Pictograms:



Warning

Hazard statements

H319 H317

Causes serious eye irritation. May cause an allergic skin reaction.

Precautionary statements

P261	Avoid breathing vapours.
P280	Wear protective gloves/eye protection/face protection.
P333+P313	If skin irritation or rash occurs: Get medical advice / attention.
P337+P313	If eye irritation persists: Get medical advice / attention.
P362+P364	Take off contaminated clothing and wash it before reuse.



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2.3. Other hazards

No information available.

SECTION 3: Composition/information on ingredients

3.2. Mixtures Hazardous

components

CAS No	Chemical name	Chemical name			
	EC No Index No REACH No				
	GHS Classification				
94-36-0	Dibenzoyl peroxide	Dibenzoyl peroxide			
	202-327-6	617-008-00-0	01-2119511472-50		
	Org. Perox. B, Eye Irrit. 2, Skin Sens. 1, Aquatic Acute 1 (M-Factor = 10), Aquatic Chronic 1 (M-Factor = 10); H241 H319 H317 H400 H410				

Full text of H and EUH statements: see section 16.

Further Information

The product has been tested for aquatic toxicity. The tests show no need for classification of the product as toxic and harmful to aquatic life. Test reports are available.

SECTION 4: First aid measures

4.1. Description of first aid measures

General information

First aider: Pay attention to self-protection! Take off immediately all contaminated clothing and wash it before reuse. Get medical advice/attention if you feel unwell.

After inhalation

Provide fresh air. When in doubt or if symptoms are observed, get medical advice.

After contact with skin

After contact with skin, wash immediately with plenty of water and soap. Take off immediately all contaminated clothing and wash it before reuse. Medical treatment necessary.

After contact with eyes

In case of contact with eyes flush immediately with plenty of flowing water for 10 to 15 minutes holding eyelids apart and consult an ophthalmologist. Remove contact lenses, if present and easy to do. Continue rinsing.

After ingestion

Do NOT induce vomiting. Rinse mouth thoroughly with water. Medical treatment necessary.

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

May cause an allergic skin reaction. Causes serious eye irritation.

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

Treat symptomatically.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media

Foam Extinguishing powder Water spray jet Page 2 of 10



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Carbon dioxide (CO2)

Unsuitable extinguishing media

Full water jet

5.2. Special hazards arising from the substance or mixture

Pyrolysis products, toxic Carbon monoxide

5.3. Advice for firefighters

In case of fire and/or explosion do not breathe fumes.

Wear a self-contained breathing apparatus and chemical protective clothing. Full protection suit

Additional information

Suppress gases/vapours/mists with water spray jet. Collect contaminated fire extinguishing water separately. Do not allow entering drains or surface water.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Use personal protective equipment as required. Provide adequate ventilation. Avoid contact with skin, eyes and clothes.

6.2. Environmental precautions

Do not allow to enter into surface water or drains.

6.3. Methods and material for containment and cleaning up

Collect spillage. Take up mechanically, placing in appropriate containers for disposal. Suitable material for taking up: Sand

Treat the recovered material as prescribed in the section on waste disposal. Retain contaminated washing water and dispose it.

6.4. Reference to other sections

Safe handling: see section 7 Personal protection equipment: see section 8 Disposal: see section 13

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Advice on safe handling

Use only outdoors or in a well-ventilated area. Wear personal protection equipment (refer to section 8). Avoid contact with skin, eyes and clothes. When using do not eat, drink or smoke. Wash hands thoroughly after handling. Take off contaminated clothing and wash it before reuse.

7.2. Conditions for safe storage. including any incompatibilities

Requirements for storage rooms and vessels

Keep container tightly closed. Store in a place accessible by authorized persons only. Keep only in the original container in a cool, well-ventilated place.

Hints on joint storage

Do not store together with: Oxidising agent, strong Do not use for products which come into contact with the food stuffs.

Further information on storage conditions

Keep container tightly closed in a cool place. storage temperature: 5 - 25°C

7.3. Specific end use(s)

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see section 1.2

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Exposure limits (EH40)

CAS No	Substance	ppm	mg/m³	fibres/ml	Category	Origin
94-36-0	Dibenzoyl peroxide	-	5		TWA (8 h)	WEL
56-81-5	Glycerol, mist	-	10		TWA (8 h)	WEL

DNEL/DMEL values

CAS No	Substance				
DNEL type		Exposure route	Effect	Value	
94-36-0	4-36-0 Dibenzoyl peroxide				
Consumer DN	Consumer DNEL, long-term		systemic	2 mg/kg bw/day	
Worker DNEL, long-term		dermal	systemic	13,3 mg/kg bw/day	
Worker DNEL, long-term		inhalation	systemic	39 mg/m ³	

PNEC values

CAS No	Substance	
Environmental compartment		Value
94-36-0 Dibenzoyl peroxide		
Freshwater		0,00002 mg/l
Marine water		0,000002 mg/l
Freshwater sediment		0,013 mg/kg
Marine sediment		0,001 mg/kg

Additional advice on limit values

This mixture contains quartz filler which is firmly bound in the pasty component, and thus not freely available during use, so that a risk of dust inhalation is excluded. Exposure limit values for respirable dusts are not relevant for this product.

8.2. Exposure controls







Appropriate engineering controls

Provide adequate ventilation. If local exhaust ventilation is not possible or not sufficient, the entire working area must be ventilated by technical means.

Protective and hygiene measures

Take off contaminated clothing and wash it before reuse. Draw up and observe skin protection programme. Wash hands thoroughly after handling. When using do not eat or drink.

Eye/face protection

Wear eye protection/face protection. Wear safety glasses.

Hand protection

Disposable gloves

Recommended material: NBR (Nitrile rubber)



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Breakthrough time: > 480 min Thickness of the glove material: > 0,2 mm DIN-/EN-Norms: EN 374

When handling with chemical substances, protective gloves must be worn with the CE-label including the four control digits. For special purposes, it is recommended to check the resistance to chemicals of the protective gloves mentioned above together with the supplier of these gloves.

Skin protection

Wear suitable protective clothing.

Respiratory protection

In case of inadequate ventilation wear respiratory protection. Respiratory protection with combination filter A1P2 (organic gases/vapors and particles) recommended.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

 Information on basic physical and c Physical state: 	solid (pasty)
Colour:	black
Odour:	characteristic
pH-Value:	not determined
Changes in the physical state	
Melting point:	not determined
Initial boiling point and boiling range:	not determined
Flash point:	not applicable
Flammability	
Solid:	not determined
Gas:	not applicable
Lower explosion limits:	not determined
Upper explosion limits:	not determined
Auto-ignition temperature	
Solid:	not determined
Gas:	not applicable
Decomposition temperature:	not determined
Oxidizing properties	
Not oxidising.	
Available oxygen content (%) < 1% no classification	
	not determined
Vapour pressure:	
Density (at 20 °C):	1,59 g/cm ³
Water solubility:	The study does not need to be conducted because the substance is known to be
	insoluble in water.
Solubility in other solvents	
not determined	
Partition coefficient:	not determined
Vapour density:	not determined
Evaporation rate:	not determined



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9.2. Other information

Solid content:

not determined

SECTION 10: Stability and reactivity

10.1. Reactivity

see section 10.3

10.2. Chemical stability

The product is stable under storage at normal ambient temperatures.

10.3. Possibility of hazardous reactions

Violent reaction with: Oxidising agent

10.4. Conditions to avoid

see section 7.2

10.5. Incompatible materials

Oxidising agent, strong

10.6. Hazardous decomposition products

Benzoic acid Benzene Biphenyl

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity

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

CAS No	Chemical name						
	Exposure route	Dose		Species	Source	Method	
94-36-0	Dibenzoyl peroxide						
	oral	LD50 mg/kg	> 5000	Rat			

Irritation and corrosivity

Causes serious eye irritation.

Skin corrosion/irritation: Based on available data, the classification criteria are not met.

Sensitising effects

May cause an allergic skin reaction. (Dibenzoyl peroxide)

Carcinogenic/mutagenic/toxic effects for reproduction

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

STOT-single exposure

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

STOT-repeated exposure

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

Aspiration hazard

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

Further information

The mixture is classified as hazardous according to regulation (EC) No 1272/2008 [CLP].

SECTION 12: Ecological information

12.1. Toxicity

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The product is not: Ecotoxic.

OECD 201 (Desmodesmus subspicatus) IC10: (0 - 72 h) = 30 mg/l IC50: (0 - 72 h) = 150 mg/l

OECD 202 (Daphnia magna)			
EC0/NOEC (48h) = 100 mg/l			
(48h) = >500 mg/l			
(48h) = >>500 mg/l			

OECD 203 (Danio rerio) LC0/NOEC : 250 mg/l LC50 : > 500 mg/l LC100 : >> 500 mg/l

CAS No	Chemical name						
	Aquatic toxicity	Dose		[h] [d]	Species	Source	Method
94-36-0	Dibenzoyl peroxide						
	Acute fish toxicity	LC50 mg/l	0,0602	96 h	Oncorhynchus mykiss (Rainbow trout)	OECD 203	
	Acute algae toxicity	ErC50 mg/l	0,0711		Pseudokirchneriella subcapitata	OECD 201	
	Acute crustacea toxicity	EC50	0,11 mg/l		Daphnia magna (Big water flea)	OECD 202	
	Algae toxicity	NOEC	0,02 mg/l		Pseudokirchneriella subcapitata	OECD 201	
	Crustacea toxicity	NOEC mg/l	0,001		Daphnia magna (Big water flea)	OECD 211	
	Acute bacteria toxicity	(35 mg/l)	0,5 h		OECD 209	

12.2. Persistence and degradability

The product has not been tested.

CAS No	Chemical name			
	Method	Value	d	Source
	Evaluation			
94-36-0	Dibenzoyl peroxide			
	OECD 301D	71%	28	
	Readily biodegradable (according to OECD cr	iteria).		

12.3. Bioaccumulative potential

The product has not been tested.

Partition coefficient n-octanol/water	
---------------------------------------	--

CAS No	Chemical name	Log Pow
94-36-0	Dibenzoyl peroxide	3,2

12.4. Mobility in soil

The product has not been tested.

12.5. Results of PBT and vPvB assessment

The product has not been tested.

12.6. Other adverse effects

No information available.



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Further information

Do not allow to enter into surface water or drains. Do not allow to enter into soil/subsoil.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Disposal recommendations

Subsequent waste code numbers of the European Waste Catalogue are considered as recommendations. Dispose of waste according to applicable legislation. Do not allow to enter into surface water or drains. Do not allow to enter into soil/subsoil.

List of Wastes Code - residues/unused products

WASTES FROM THE MANUFACTURE, FORMULATION, SUPPLY AND USE (MFSU) OF COATINGS 080409 (PAINTS, VARNISHES AND VITREOUS ENAMELS), ADHESIVES, SEALANTS AND PRINTING INKS; wastes from MFSU of adhesives and sealants (including waterproofing products); waste adhesives and sealants containing organic solvents or other hazardous substances; hazardous waste

List of Wastes Code - used product

080409 WASTES FROM THE MANUFACTURE, FORMULATION, SUPPLY AND USE (MFSU) OF COATINGS (PAINTS, VARNISHES AND VITREOUS ENAMELS), ADHESIVES, SEALANTS AND PRINTING INKS: wastes from MFSU of adhesives and sealants (including waterproofing products); waste adhesives and sealants containing organic solvents or other hazardous substances; hazardous waste

List of Wastes Code - contaminated packaging

WASTE PACKAGING; ABSORBENTS, WIPING CLOTHS, FILTER MATERIALS AND PROTECTIVE 150110 CLOTHING NOT OTHERWISE SPECIFIED; packaging (including separately collected municipal packaging waste); packaging containing residues of or contaminated by hazardous substances; hazardous waste

SECTION 14: Transport information

Land transport (ADR/RID)

<u>14.1. UN number:</u>	No dangerous good in sense of this transport regulation.
<u>14.2. UN proper shipping name:</u>	No dangerous good in sense of this transport regulation.
<u>14.3. Transport hazard class(es):</u>	No dangerous good in sense of this transport regulation.
14.4. Packing group:	No dangerous good in sense of this transport regulation.
Inland waterways transport (ADN)	
<u>14.1. UN number:</u>	No dangerous good in sense of this transport regulation.
14.2. UN proper shipping name:	No dangerous good in sense of this transport regulation.
<u>14.3. Transport hazard class(es):</u>	No dangerous good in sense of this transport regulation.
14.4. Packing group:	No dangerous good in sense of this transport regulation.
Marine transport (IMDG)	
<u>14.1. UN number:</u>	No dangerous good in sense of this transport regulation.
<u>14.2. UN proper shipping name:</u>	No dangerous good in sense of this transport regulation.
<u>14.3. Transport hazard class(es):</u>	No dangerous good in sense of this transport regulation.
<u>14.4. Packing group:</u>	No dangerous good in sense of this transport regulation.
Air transport (ICAO-TI/IATA-DGR)	
<u>14.1. UN number:</u>	No dangerous good in sense of this transport regulation.
<u>14.2. UN proper shipping name:</u>	No dangerous good in sense of this transport regulation.
<u>14.3. Transport hazard class(es):</u>	No dangerous good in sense of this transport regulation.
14.4. Packing group:	No dangerous good in sense of this transport regulation.
evision No: 00,00	GB - EN



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14.5. Environmental hazards

ENVIRONMENTALLY HAZARDOUS: no

14.6. Special precautions for user

No information available.

14.7. Transport in bulk according to Annex II of Marpol and the IBC Code

not applicable

SECTION 15: Regulatory information

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

EU regulatory information

Information according to 2012/18/EU Not subject to 2012/18/EU (SEVESO III) (SEVESO III):

Additional information

VOC content: 4,3 % (DIN EN ISO 11890-2)

To follow: 850/2004/EC , 79/117/EEC , 689/2008/EC

National regulatory information

Employment restrictions:	Observe restrictions to employment for juveniles according to the 'juvenile work protection guideline' (94/33/EC).
Water hazard class (D):	1 - slightly hazardous to water
Skin resorption/Sensitization:	Causes allergic hypersensitivity reactions.

SECTION 16: Other information

Changes

This data sheet contains changes from the previous version in section(s): 2.

Abbreviations and acronyms

ADN: Accord européen relativ au transport international des marchandises Dangereuses par voie de Navigation (European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways) ADR: Accord européen sur le transport des marchandises dangereuses par route (European Agreement concerning the International Carriage of Dangerous Goods by Road) CAS: Chemical Abstracts Service CLP: Classification, Labeling and Packaging DMEL: Derived Minimal Effect level **DNEL: Derived No Effect Level** EC50: Effective concentration, 50% IATA: International Air Transport Association IATA-DGR: Dangerous Goods Regulations (DRG) for the air transport (IATA) ICAO: International Civil Aviation Organization IC50: Inhibitory concentration, 50% IMDG: International Maritime Code for Dangerous Goods LC50: Lethal concentration, 50% LD50: Lethal dose, 50% NOEC: No Observed Effect Concentration OECD: Oragnisation for Economic Co-operation and Development PBT: persistent, bioaccumulative and toxic vPvB: very persistent and very bioaccumulative PNEC: Predicted No Effect Concentration REACH: Registration, Evaluation, Authorisation and Restriction of Chemicals

RID: Règlement concernant le transport international ferroviaire de marchandises dangereuses (Regulations

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Concerning the International Carriage of Dangerous Goods by Rail) VOC: Volatile organic compound Aquatic Acute 1: Acute aquatic hazard, Category 1 Aquatic Chronic 1: Long-term aquatic hazard, Category 1 Eye Irrit. 2: Serious eye damage/eye irritation, Category 2 Skin Sens. 1: Skin sensitilization, Category 1 Org. Perox. B: Organic Peroxides, Type B

Classification for mixtures and used evaluation method according to Regulation (EC) No. 1272/2008 [CLP]

Classification	Classification procedure
Eye Irrit. 2; H319	Calculation method
Skin Sens. 1; H317	Calculation method

Relevant H and EUH statements (number and full text)

H241	Heating may cause a fire or explosion.
H317	May cause an allergic skin reaction.
H319	Causes serious eye irritation.
H400	Very toxic to aquatic life.
H410	Very toxic to aquatic life with long lasting effects.

Further Information

The above information describes exclusively the safety requirements of the product and is based on our present-day knowledge. The information is intended to give you advice about the safe handling of the product named in this safety data sheet, for storage, processing, transport and disposal. The information cannot be transferred to other products. In the case of mixing the product with other products or in the case of processing, the information on this safety data sheet is not necessarily valid for the new made-up material.

(The data for the hazardous ingredients were taken respectively from the last version of the sub-contractor's safety data sheet.)