

Safety Data Sheet

according to UK REACH Regulation

AFO Bonding Gel

Revision date: 19.01.2023

Product code: 1500050-1

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SECTION 1: Identification of the substance/mixture and of the company/undertaking**1.1. Product identifier**

AFO Bonding Gel

Further trade names

21340, 21368, 20794

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

Cosmetics, personal care products

Restricted to professional users.

1.3. Details of the supplier of the safety data sheet

Company name:	Wilde Cosmetics GmbH	
Street:	Rheingastr. 19a	
Place:	D-65375 Oestrich-Winkel	
Post-office box:	1220	
	D-65368 Oestrich-Winkel	
Telephone:	+49-6723-6020-0	Telefax: +49-6723-6020-15
e-mail:	info@wilde-group.com	
Contact person:	Dr. Beate Kerntopf	Telephone: -752
Internet:	www.wilde-group.com	

1.4. Emergency telephone number:

+49-6723-6020-0 This telephone number is available during office hours only.

SECTION 2: Hazards identification**2.1. Classification of the substance or mixture****GB CLP Regulation**

Skin Corr. 1A; H314
 Eye Dam. 1; H318
 Skin Sens. 1; H317
 STOT SE 3; H335
 Aquatic Chronic 3; H412

Full text of hazard statements: see SECTION 16.

The Product is subject to the German Cosmetics Ordinance.

2.2. Label elements**GB CLP Regulation****Hazard components for labelling**

URETHANE ACRYLATE
 methacrylic acid; 2-methylpropenoic acid
 (1-methyl-1,2-ethanediyl)bis[oxy(methyl-2,1-ethanediyl)] diacrylate
 HYDROXYPROPYL METHACRYLATE
 PENTAERYTHRITYL TRIACRYLATE
 ETHYL TRIMETHYLBENZOYL PHENYLPHOSPHINATE
 METHYL BENZOYLFORMATE

Signal word: Danger**Pictograms:**

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Hazard statements

H314	Causes severe skin burns and eye damage.
H317	May cause an allergic skin reaction.
H335	May cause respiratory irritation.
H412	Harmful to aquatic life with long lasting effects.

Precautionary statements

P260	Do not breathe dust/fume/gas/mist/vapours/spray.
P264	Wash hands thoroughly after handling.
P271	Use only outdoors or in a well-ventilated area.
P272	Contaminated work clothing should not be allowed out of the workplace.
P273	Avoid release to the environment.
P280	Wear protective gloves/protective clothing/eye protection/face protection/hearing protection.
P301+P330+P331	IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.
P302+P352	IF ON SKIN: Wash with plenty of soap and water.
P303+P361+P353	IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water or shower.
P333+P313	If skin irritation or rash occurs: Get medical advice/attention.
P362+P364	Take off contaminated clothing and wash it before reuse.
P304+P340	IF INHALED: Remove person to fresh air and keep comfortable for breathing.
P310	Immediately call a POISON CENTER/doctor.
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/doctor.
P403+P233	Store in a well-ventilated place. Keep container tightly closed.
P405	Store locked up.
P501	Dispose of contents/container to an appropriate recycling or disposal facility.

Special labelling of certain mixtures

Restricted to professional users.

2.3. Other hazards

Keep out of the reach of children. Harmful in contact with skin and if swallowed. Causes severe burns. Irritating to eyes, respiratory system and skin. May cause sensitization by skin contact. Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

SECTION 3: Composition/information on ingredients**3.2. Mixtures****Chemical characterization**

Cosmetic product: resinoid
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Hazardous components

CAS No	Chemical name			Quantity
	EC No	Index No	REACH No	
	Classification (GB CLP Regulation)			
	URETHANE ACRYLATE			50-100 %
	Skin Irrit. 2, Eye Irrit. 2, Skin Sens. 1, Aquatic Chronic 3; H315 H319 H317 H412			
79-41-4	methacrylic acid; 2-methylpropenoic acid			10-25 %
	201-204-4	607-088-00-5		
	Acute Tox. 4, Acute Tox. 4, Skin Corr. 1A; H312 H302 H314			
3290-92-4	TRIMETHYLOLPROPANE TRIMETHACRYLATE			10-25 %
	221-950-4		01-2119542176-41	
	Aquatic Chronic 2; H411			
42978-66-5	(1-methyl-1,2-ethanediyl)bis[oxy(methyl-2,1-ethanediyl)] diacrylate			5-10 %
	256-032-2	607-249-00-X		
	Skin Irrit. 2, Eye Irrit. 2, Skin Sens. 1, STOT SE 3, Aquatic Chronic 2; H315 H319 H317 H335 H411			
27813-02-1	HYDROXYPROPYL METHACRYLATE			5-10 %
	248-666-3		01-2119490226-37	
	Eye Irrit. 2, Skin Sens. 1; H319 H317			
1245638-61-2	PENTAERYTHRITYL TRIACRYLATE			1-5 %
	629-850-6		01-2119490003-49	
	Acute Tox. 4, Skin Irrit. 2, Eye Dam. 1, Skin Sens. 1, Aquatic Chronic 2; H302 H315 H318 H317 H411			
84434-11-7	ETHYL TRIMETHYLBENZOYL PHENYLPHOSPHINATE			0,1-1 %
	282-810-6		01-2119987994-10	
	Skin Sens. 1B, Aquatic Chronic 2; H317 H411			
15206-55-0	METHYL BENZOYLFORMATE			0,1-1 %
	239-263-3		01-2120101338-67	
	Skin Irrit. 2, Eye Irrit. 2, Skin Sens. 1, STOT SE 3; H315 H319 H317 H335			

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

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Specific Conc. Limits, M-factors and ATE

CAS No	EC No	Chemical name	Quantity
		Specific Conc. Limits, M-factors and ATE	
		URETHANE ACRYLATE	50-100 %
		oral: LD50 = >5000 mg/kg	
79-41-4	201-204-4	methacrylic acid; 2-methylpropenoic acid	10-25 %
		inhalation: LC50 = 7,1 mg/l (vapours); dermal: LD50 = >500 mg/kg; oral: LD50 = 1320 mg/kg STOT SE 3; H335: >= 1 - 100	
3290-92-4	221-950-4	TRIMETHYLOLPROPANE TRIMETHACRYLATE	10-25 %
		dermal: LD50 = >2000 mg/kg; oral: LD50 = >2000 mg/kg	
42978-66-5	256-032-2	(1-methyl-1,2-ethanediyl)bis[oxy(methyl-2,1-ethanediyl)] diacrylate	5-10 %
		dermal: LD50 = >2000 mg/kg; oral: LD50 = >2000 mg/kg STOT SE 3; H335: >= 10 - 100	
27813-02-1	248-666-3	HYDROXYPROPYL METHACRYLATE	5-10 %
		dermal: LD50 = >5000 mg/kg; oral: LD50 = >2000 mg/kg	
1245638-61-2	629-850-6	PENTAERYTHRITYL TRIACRYLATE	1-5 %
		dermal: LD50 = >2000 mg/kg; oral: LD50 = 540 mg/kg	
84434-11-7	282-810-6	ETHYL TRIMETHYLBENZOYL PHENYLPHOSPHINATE	0,1-1 %
		dermal: LD50 = >2000 mg/kg; oral: LD50 = >5000 mg/kg	
15206-55-0	239-263-3	METHYL BENZOYLFORMATE	0,1-1 %
		dermal: LD50 = >2000 mg/kg; oral: LD50 = >6800 mg/kg	

Further Information

The Product is subject to the German Cosmetics Ordinance.

SECTION 4: First aid measures

4.1. Description of first aid measures

General information

Evacuate personnel to safe areas. Take off all contaminated clothing immediately. Consult a physician if necessary. Show this safety data sheet to the doctor in attendance.

If unconscious place in recovery position and seek medical advice.

After inhalation

Move to fresh air. Keep patient warm and at rest. If breathing is irregular or stopped, administer artificial respiration. If unconscious place in recovery position and seek medical advice.

After contact with skin

In case of contact, immediately flush skin with soap and plenty of water. If skin irritation occurs, seek medical advice/attention. In case of accidental skin contact avoid concurrent exposure to the sun or other sources of UV light which may increase the sensitivity of skin.

After contact with eyes

In case of eye contact, remove contact lens and rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Consult a physician.

In case of accidental eye contact avoid concurrent exposure to the sun or other sources of UV light which may increase the sensitivity of eye.

After ingestion

Clean mouth with water and drink afterwards plenty of water. Do NOT induce vomiting. Call a physician immediately.

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

No data is available on the product itself.

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

Treat symptomatically. In case of lung irritation, first treatment with dexametason aerosol (spray).

SECTION 5: Firefighting measures

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5.1. Extinguishing media

Suitable extinguishing media

Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide. Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

Unsuitable extinguishing media

Do not use a solid water stream as it may scatter and spread fire.

5.2. Special hazards arising from the substance or mixture

Polymerization can occur. Polymerization is a highly exothermic reaction and may generate sufficient heat to cause thermal decomposition and/or rupture containers. Heating or fire can release toxic gas. Use water spray to cool unopened containers.

Take necessary action to avoid static electricity discharge (which might cause ignition of organic vapours).

Keep away from sources of ignition - No smoking.

5.3. Advice for firefighters

Wear self-contained breathing apparatus and protective suit. Use only explosion-proof equipment.

Additional information

Collect contaminated fire extinguishing water separately. This must not be discharged into drains. Prevent fire extinguishing water from contaminating surface water or the ground water system. Fire residues and contaminated fire extinguishing water must be disposed of in accordance with local regulations.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

General advice

Ensure adequate ventilation. Evacuate personnel to safe areas. Use personal protective equipment. Keep away from sources of ignition - No smoking. Avoid breathing vapors, mist or gas. Avoid contact with skin and eyes.

6.2. Environmental precautions

Do not flush into surface water or sanitary sewer system. If the product contaminates rivers and lakes or drains inform respective authorities.

6.3. Methods and material for containment and cleaning up

Other information

Contain spillage, soak up with non-combustible absorbent material, (e.g. sand, earth, diatomaceous earth, vermiculite) and transfer to a container for disposal according to local / national regulations (see section 13). Ensure adequate ventilation. Use explosion-proof equipment.

6.4. Reference to other sections

13. Disposal considerations

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Advice on safe handling

Use only with adequate ventilation. Handle and open container with care. Avoid contact with skin, eyes and clothing. Avoid breathing vapors, mist or gas. Wash hands before breaks and at the end of workday. Handle in accordance with good industrial hygiene and safety practice. Take notice of labels and material safety data sheets for the working chemicals. Refer also to instructions for use.

Advice on protection against fire and explosion

Keep away from sources of ignition - No smoking. Keep away from heat. May be ignited by open flame.

Advice on general occupational hygiene

Provide sufficient air exchange and/or exhaust in work rooms. Handle and open container with care. Keep away from food, drink and animal feedingstuffs. Avoid contact with skin, eyes and clothing. Take off all contaminated clothing immediately. Wash hands before breaks and at the end of workday.

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Further information on handling

Polymerisation occurs when exposed to white light, ultraviolet light or heat.
Refer also to instructions for use.

7.2. Conditions for safe storage, including any incompatibilities**Requirements for storage rooms and vessels**

Store in original container. Keep tightly closed in a dry, cool and well-ventilated place. Protect from frost, heat and sunlight. Polymerisation occurs when exposed to white light, ultraviolet light or heat.

Hints on joint storage

Do not store together with: Material, oxygen-rich, Oxidising; Explosives; alkalines.

Further information on storage conditions

Recommended storage temperature: >18 - <25 °C. Short-term maximum storage temperature permitted: 40 °C.

7.3. Specific end use(s)

Cosmetic product

SECTION 8: Exposure controls/personal protection**8.1. Control parameters****Exposure limits (EH40)**

CAS No	Substance	ppm	mg/m ³	fibres/ml	Category	Origin
79-41-4	Methacrylic acid	20	72		TWA (8 h)	WEL
		40	143		STEL (15 min)	WEL

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DNEL/DMEL values

CAS No	Substance	Exposure route	Effect	Value
79-41-4	methacrylic acid; 2-methylpropenoic acid			
Worker DNEL, long-term		inhalation	systemic	29,6 mg/m ³
Worker DNEL, long-term		inhalation	local	88 mg/m ³
Worker DNEL, long-term		dermal	systemic	4,25 mg/kg bw/day
Consumer DNEL, long-term		inhalation	systemic	6,3 mg/m ³
Consumer DNEL, long-term		inhalation	local	6,55 mg/m ³
Consumer DNEL, long-term		dermal	systemic	2,55 mg/kg bw/day
3290-92-4	TRIMETHYLOLPROPANE TRIMETHACRYLATE			
Worker DNEL, long-term		inhalation	systemic	14,81 mg/m ³
Worker DNEL, long-term		dermal	systemic	42 mg/kg bw/day
Worker DNEL, long-term		dermal	local	9,33 mg/cm ²
Consumer DNEL, long-term		inhalation	systemic	2,6 mg/m ³
Consumer DNEL, long-term		dermal	systemic	15 mg/kg bw/day
Consumer DNEL, long-term		dermal	local	4,67 mg/cm ²
Consumer DNEL, long-term		oral	systemic	1,5 mg/kg bw/day
42978-66-5	(1-methyl-1,2-ethanediyl)bis[oxy(methyl-2,1-ethanediyl)] diacrylate			
Worker DNEL, long-term		inhalation	systemic	2,35 mg/m ³
Worker DNEL, long-term		dermal	systemic	1,7 mg/kg bw/day
27813-02-1	HYDROXYPROPYL METHACRYLATE			
Worker DNEL, long-term		inhalation	systemic	14,7 mg/m ³
Worker DNEL, long-term		dermal	systemic	4,2 mg/kg bw/day
Consumer DNEL, long-term		inhalation	systemic	8,8 mg/m ³
Consumer DNEL, long-term		dermal	systemic	2,5 mg/kg bw/day
Consumer DNEL, long-term		oral	systemic	2,5 mg/kg bw/day
84434-11-7	ETHYL TRIMETHYLBENZOYL PHENYLPHOSPHINATE			
Worker DNEL, long-term		inhalation	systemic	4,93 mg/m ³
Worker DNEL, long-term		dermal	systemic	1,4 mg/kg bw/day
Consumer DNEL, long-term		inhalation	systemic	0,87 mg/m ³
Consumer DNEL, long-term		dermal	systemic	0,5 mg/kg bw/day
Consumer DNEL, long-term		oral	systemic	0,5 mg/kg bw/day
15206-55-0	METHYL BENZOYLFORMATE			
Worker DNEL, long-term		dermal	systemic	3,33 mg/kg bw/day
Consumer DNEL, long-term		dermal	systemic	1,67 mg/kg bw/day
Consumer DNEL, long-term		oral	systemic	1,67 mg/kg bw/day

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PNEC values

CAS No	Substance	Value
Environmental compartment		
79-41-4	methacrylic acid; 2-methylpropenoic acid	
Freshwater		0,82 mg/l
Freshwater (intermittent releases)		0,82 mg/l
Marine water		0,82 mg/l
Micro-organisms in sewage treatment plants (STP)		10 mg/l
Soil		1,2 mg/kg
3290-92-4	TRIMETHYLOLPROPANE TRIMETHACRYLATE	
Freshwater		0,00276 mg/l
Freshwater (intermittent releases)		0,02 mg/l
Marine water		0,000276 mg/l
Freshwater sediment		0,4951 mg/kg
Marine sediment		0,04951 mg/kg
Micro-organisms in sewage treatment plants (STP)		10 mg/l
Soil		0,0974 mg/kg
42978-66-5	(1-methyl-1,2-ethanediyl)bis[oxy(methyl-2,1-ethanediyl)] diacrylate	
Freshwater		0,0046 mg/l
Freshwater (intermittent releases)		0,046 mg/l
Marine water		0,00046 mg/l
Freshwater sediment		0,487 mg/kg
Marine sediment		0,0487 mg/kg
Micro-organisms in sewage treatment plants (STP)		10 mg/l
Soil		0,0945 mg/kg
27813-02-1	HYDROXYPROPYL METHACRYLATE	
Freshwater		0,904 mg/l
Freshwater (intermittent releases)		0,972 mg/l
Marine water		0,904 mg/l
Marine water (intermittent releases)		0,972 mg/l
Freshwater sediment		6,28 mg/kg
Marine sediment		6,28 mg/kg
Micro-organisms in sewage treatment plants (STP)		10 mg/l
Soil		0,727 mg/kg
1245638-61-2	PENTAERYTHRITYL TRIACRYLATE	
Freshwater		0,0032 mg/l
Freshwater (intermittent releases)		0,032 mg/l
Marine water		0,00032 mg/l
Freshwater sediment		0,032 mg/l
Marine sediment		0,0032 mg/l
Micro-organisms in sewage treatment plants (STP)		10 mg/l
Soil		0,0046 mg/l
84434-11-7	ETHYL TRIMETHYLBENZOYL PHENYLPHOSPHINATE	

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Freshwater	0,00101 mg/l
Freshwater (intermittent releases)	0,0101 mg/l
Marine water	0,000101 mg/l
Marine water (intermittent releases)	0,00101 mg/l
Freshwater sediment	0,24 mg/kg
Marine sediment	0,024 mg/kg
Soil	0,047 mg/kg
15206-55-0	METHYL BENZOYLFORMATE
Freshwater	0,0686 mg/l
Freshwater (intermittent releases)	0,686 mg/l
Marine water	0,00686 mg/l
Freshwater sediment	0,47 mg/kg
Marine sediment	0,047 mg/kg
Micro-organisms in sewage treatment plants (STP)	39 mg/l
Soil	0,027 mg/kg

Additional advice on limit values

No data is available on the product itself.

8.2. Exposure controls



Appropriate engineering controls

Information about special precautions needed for bulk handling is available on request. Handle in accordance with good industrial hygiene and safety practice. To avoid risks to man and the environment, comply with the instructions for use.

Individual protection measures, such as personal protective equipment

Eye/face protection

Tightly fitting safety goggles

Hand protection

Use protective skin cream before handling the product.

Nitrile rubber/Neoprene-Wear protective gloves.

Break through time: ≥ 1 h

Glove thickness: 0,5 mm

Please observe the instructions regarding permeability and breakthrough time which are provided by the supplier of the gloves. Also take into consideration the specific local conditions under which the product is used, such as the danger of cuts, abrasion, and the contact time.

Replace when worn.

Skin protection

Protective suit: Long sleeved clothing.

Respiratory protection

Use only with adequate ventilation. In case of insufficient ventilation wear suitable respiratory equipment.

Environmental exposure controls

The product should not be allowed to enter drains, water courses or the soil. Inform the responsible authorities in case of gas leakage, or of entry into waterways, soil or drains.

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SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state:	viscous liquid
Colour:	clear, colourless
Odour:	characteristic
Boiling point or initial boiling point and boiling range:	120 °C
Flash point:	67 °C
Auto-ignition temperature:	214 °C
Water solubility:	insoluble
Solubility in other solvents	
miscible with most organic solvents: Acetone, Alcohol	
Vapour pressure:	0,97 hPa
(at 20 °C)	
Density (at 20 °C):	ca. 1,10 g/cm ³

SECTION 10: Stability and reactivity

10.1. Reactivity

No data is available on the product itself.

10.2. Chemical stability

Keep containers tightly closed in a cool, well-ventilated place.

10.3. Possibility of hazardous reactions

Polymerization can occur.

10.4. Conditions to avoid

Extremes of temperature and direct sunlight. Exposure to light.

Heat, flames and sparks.

Polymerization can occur.

Do not smoke.

10.5. Incompatible materials

Strong oxidizing agents, Strong acids and strong bases, Peroxides

10.6. Hazardous decomposition products

In case of fire hazardous decomposition products may be produced such as: Carbon dioxide (CO₂), carbon monoxide (CO), oxides of nitrogen (NO_x), dense black smoke.

Oxidizing and spontaneously flammable products.

SECTION 11: Toxicological information

11.1. Information on hazard classes as defined in GB CLP Regulation

Toxicokinetics, metabolism and distribution

No data is available on the product itself.

Acute toxicity

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

ATEmix calculated

ATE (oral) 5354,7 mg/kg; ATE (dermal) 6642,5 mg/kg; ATE (inhalation vapour) 42,87 mg/l

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CAS No	Chemical name				
	Exposure route	Dose	Species	Source	Method
	URETHANE ACRYLATE				
	oral	LD50 >5000 mg/kg	rat		
79-41-4	methacrylic acid; 2-methylpropenoic acid				
	oral	LD50 1320 mg/kg	Rat		OECD 401
	dermal	LD50 >500 mg/kg	Rabbit		
	inhalation (4 h) vapour	LC50 7,1 mg/l	Rat		OECD 403
3290-92-4	TRIMETHYLOLPROPANE TRIMETHACRYLATE				
	oral	LD50 >2000 mg/kg	rat		OECD 423
	dermal	LD50 >2000 mg/kg	rat		OECD 402
42978-66-5	(1-methyl-1,2-ethanediyl)bis[oxy(methyl-2,1-ethanediyl)] diacrylate				
	oral	LD50 >2000 mg/kg	rat		OECD Test Guideline 401
	dermal	LD50 >2000 mg/kg	rabbit		OECD Test Guideline 402
27813-02-1	HYDROXYPROPYL METHACRYLATE				
	oral	LD50 >2000 mg/kg	rat		OECD Test Guideline 401
	dermal	LD50 >5000 mg/kg	rabbit		
1245638-61-2	PENTAERYTHRITYL TRIACRYLATE				
	oral	LD50 540 mg/kg	rat		OECD Test Guideline 401
	dermal	LD50 >2000 mg/kg	rabbit		OECD Test Guideline 402
84434-11-7	ETHYL TRIMETHYLBENZOYL PHENYLPHOSPHINATE				
	oral	LD50 >5000 mg/kg	rat		OECD 401
	dermal	LD50 >2000 mg/kg	rat		OECD 402
15206-55-0	METHYL BENZOYLFORMATE				
	oral	LD50 >6800 mg/kg	rat		OECD Test Guideline 401
	dermal	LD50 >2000 mg/kg	rat		OECD Test Guideline 402

Irritation and corrosivity

Causes severe skin burns and eye damage.

Causes serious eye damage.

Sensitising effects

May cause an allergic skin reaction. (URETHANE ACRYLATE; (1-methyl-1,2-ethanediyl)bis[oxy(methyl-2,1-ethanediyl)] diacrylate; HYDROXYPROPYL METHACRYLATE; PENTAERYTHRITYL TRIACRYLATE; ETHYL TRIMETHYLBENZOYL PHENYLPHOSPHINATE; METHYL BENZOYLFORMATE)

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Carcinogenic/mutagenic/toxic effects for reproduction

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

STOT-single exposure

May cause respiratory irritation. (methacrylic acid; 2-methylpropenoic acid)

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.

Specific effects in experiment on an animal

No data is available on the product itself.

Practical experience

Health injuries are not known or expected under normal use.

SECTION 12: Ecological information

12.1. Toxicity

No data is available on the product itself.

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CAS No	Chemical name					
	Aquatic toxicity	Dose	[h] [d]	Species	Source	Method
79-41-4	methacrylic acid; 2-methylpropenoic acid					
	Acute fish toxicity	LC50 85 mg/l	96 h	Oncorhynchus mykiss (Rainbow trout)		
	Acute algae toxicity	ErC50 >20 mg/l	72 h	Pseudokirchneriella subcapitata		OECD 201
	Acute crustacea toxicity	EC50 >130 mg/l	48 h	Daphnia magna (Big water flea)		
	Fish toxicity	NOEC 10 mg/l	35 d	Danio rerio (zebrafish)		OECD 210
	Algae toxicity	NOEC 8,2 mg/l	3 d	Pseudokirchneriella subcapitata		OECD 201
	Crustacea toxicity	NOEC 53 mg/l	21 d	Daphnia magna (Big water flea)		OECD 211
	Acute bacteria toxicity	(EC50 270 mg/l)		Pseudomonas putida		DIN 38412 / part 8
3290-92-4	TRIMETHYLOLPROPANE TRIMETHACRYLATE					
	Acute fish toxicity	LC50 2 mg/l	96 h	Oncorhynchus mykiss (rainbow trout)		OECD 203
	Acute algae toxicity	ErC50 3,88 mg/l	72 h	Pseudokirchneriella subcapitata		OECD 201
	Acute crustacea toxicity	EC50 >9,22 mg/l	48 h	Daphnia magna (Water flea)		OECD 202
	Fish toxicity	NOEC 0,138 mg/l	32 d	Pimephales promelas (fathead minnow)		OECD 210
	Algae toxicity	NOEC 0,177 mg/l	3 d	Pseudokirchneriella subcapitata		OECD 201
	Crustacea toxicity	NOEC >9,2 mg/l	2 d	Daphnia magna (Water flea)		OECD 202
	Acute bacteria toxicity	(EC50 1000 mg/l)	3 h	Activated sludge		OECD 209
42978-66-5	(1-methyl-1,2-ethanediyl)bis[oxy(methyl-2,1-ethanediyl)] diacrylate					
	Acute fish toxicity	LC50 >4,6 mg/l	96 h	Leuciscus idus (Golden orfe)		DIN 38412
	Acute algae toxicity	ErC50 65,9 mg/l	72 h	Desmodesmus subspicatus		DIN 38412
	Acute crustacea toxicity	EC50 89 mg/l	48 h	Daphnia magna (Water flea)		
	Fish toxicity	NOEC 2,15 mg/l	4 d	Leuciscus idus (Golden orfe)		DIN 38412
	Algae toxicity	NOEC 6,6 mg/l	3 d	Desmodesmus subspicatus		DIN 38412
	Acute bacteria toxicity	(EC50 >1000 mg/l)	0,5 h	Activated sludge		OECD 209
27813-02-1	HYDROXYPROPYL METHACRYLATE					
	Acute fish toxicity	LC50 493 mg/l	96 h	Leuciscus idus (golden orfe)		DIN 38412 / part 15
	Acute algae toxicity	ErC50 >97,2 mg/l	72 h	Pseudokirchneriella subcapitata		OECD Test Guideline 201
	Acute crustacea toxicity	EC50 >143 mg/l	48 h	Daphnia magna (Water flea)		OECD Test Guideline 202
	Algae toxicity	NOEC 97,2 mg/l	3 d	Pseudokirchneriella subcapitata		OECD Test Guideline 201

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	Crustacea toxicity	NOEC mg/l	45,2	21 d	Daphnia magna (Water flea)		OECD 211
1245638-61-2	PENTAERYTHRITYL TRIACRYLATE						
	Acute fish toxicity	LC50	3,2 mg/l	96 h	Cyprinus carpio (Carp)		OECD Test Guideline 203
	Acute algae toxicity	ErC50	33 mg/l	96 h	Pseudokirchneriella subcapitata		OECD Test Guideline 201
	Acute crustacea toxicity	EC50	13 mg/l	48 h	Daphnia magna (Water flea)		OECD Test Guideline 202
	Fish toxicity	NOEC	2,2 mg/l	4 d	Cyprinus carpio (Carp)		OECD Test Guideline 203
	Algae toxicity	NOEC	10 mg/l	4 d	Pseudokirchneriella subcapitata		OECD Test Guideline 201
	Crustacea toxicity	NOEC mg/l	10,3	2 d	Daphnia magna (Water flea)		OECD Test Guideline 202
	Acute bacteria toxicity	(EC50 mg/l)	>100	3 h	Activated sludge		OECD 209
84434-11-7	ETHYL TRIMETHYLBENZOYL PHENYLPHOSPHINATE						
	Acute fish toxicity	LC50 mg/l	1,89	96 h	Brachydanio rerio (zebra fish)		OECD Test Guideline 203
	Acute algae toxicity	ErC50 mg/l	1,01	72 h	Desmodesmus subspicatus		OECD Test Guideline 201
	Acute crustacea toxicity	EC50 mg/l	2,26	48 h	Daphnia magna (Water flea)		OECD Test Guideline 202
	Fish toxicity	NOEC mg/l	>=1,29	4 d	Brachydanio rerio (zebra fish)		OECD Test Guideline 203
	Acute bacteria toxicity	(EC50 mg/l)	>1000	3 h	Activated sludge		OECD 209
15206-55-0	METHYL BENZOYLFORMATE						
	Acute fish toxicity	LC50	120 mg/l	96 h	Danio rerio (zebrafish)		OECD Test Guideline 203
	Acute algae toxicity	ErC50 mg/l	94,4	72 h	Pseudokirchneriella subcapitata		OECD Test Guideline 201
	Acute crustacea toxicity	EC50 mg/l	>120	48 h	Daphnia magna (Big water flea)		OECD Test Guideline 202
	Crustacea toxicity	NOEC mg/l	>=120	2 d	Daphnia magna (Water flea)		OECD Test Guideline 202
	Acute bacteria toxicity	(EC50 mg/l)	1000	3 h	Respiration inhibition of activated sludge		OECD 209

12.2. Persistence and degradability

No data is available on the product itself.

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CAS No	Chemical name			
	Method	Value	d	Source
	Evaluation			
79-41-4	methacrylic acid; 2-methylpropenoic acid			
	OECD 301D	86%	28	
	Readily biodegradable.			
3290-92-4	TRIMETHYLOLPROPANE TRIMETHACRYLATE			
	OECD 301B	53%	28	
	Not readily biodegradable.			
42978-66-5	(1-methyl-1,2-ethanediyl)bis[oxy(methyl-2,1-ethanediyl)] diacrylate			
	OECD 301B	48%	28	
	Moderately/partially biodegradable.			
27813-02-1	HYDROXYPROPYL METHACRYLATE			
	OECD 301C	81%	28	
	Readily biodegradable (according to OECD criteria).			
1245638-61-2	PENTAERYTHRITYL TRIACRYLATE			
	OECD 301B	6-14%	28	
	Not readily biodegradable.			
84434-11-7	ETHYL TRIMETHYLBENZOYL PHENYLPHOSPHINATE			
	OECD 301F	<10%	28	
	Not readily biodegradable.			
15206-55-0	METHYL BENZOYLFORMATE			
	OECD 301B	90-100%	28	
	Readily biodegradable.			

12.3. Bioaccumulative potential

No data is available on the product itself.

Partition coefficient n-octanol/water

CAS No	Chemical name	Log Pow
79-41-4	methacrylic acid; 2-methylpropenoic acid	0,93
3290-92-4	TRIMETHYLOLPROPANE TRIMETHACRYLATE	4,19
42978-66-5	(1-methyl-1,2-ethanediyl)bis[oxy(methyl-2,1-ethanediyl)] diacrylate	2,6
27813-02-1	HYDROXYPROPYL METHACRYLATE	0,97
1245638-61-2	PENTAERYTHRITYL TRIACRYLATE	3,11
84434-11-7	ETHYL TRIMETHYLBENZOYL PHENYLPHOSPHINATE	2,91
15206-55-0	METHYL BENZOYLFORMATE	1,9

BCF

CAS No	Chemical name	BCF	Species	Source
3290-92-4	TRIMETHYLOLPROPANE TRIMETHACRYLATE	270,1		
27813-02-1	HYDROXYPROPYL METHACRYLATE	3,2		
1245638-61-2	PENTAERYTHRITYL TRIACRYLATE	3,18-15		

12.4. Mobility in soil

No data is available on the product itself.

12.5. Results of PBT and vPvB assessment

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

No data is available on the product itself.

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12.6. Endocrine disrupting properties

This product does not contain a substance that has endocrine disrupting properties with respect to non-target organisms as no components meets the criteria.

12.7. Other adverse effects

Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Disposal recommendations

Dispose of contents/container in accordance with local regulation.

List of Wastes Code - residues/unused products

080199 WASTES FROM THE MANUFACTURE, FORMULATION, SUPPLY AND USE (MFSU) OF COATINGS (PAINTS, VARNISHES AND VITREOUS ENAMELS), ADHESIVES, SEALANTS AND PRINTING INKS; wastes from MFSU and removal of paint and varnish; wastes not otherwise specified

List of Wastes Code - used product

080199 WASTES FROM THE MANUFACTURE, FORMULATION, SUPPLY AND USE (MFSU) OF COATINGS (PAINTS, VARNISHES AND VITREOUS ENAMELS), ADHESIVES, SEALANTS AND PRINTING INKS; wastes from MFSU and removal of paint and varnish; wastes not otherwise specified

List of Wastes Code - contaminated packaging

080199 WASTES FROM THE MANUFACTURE, FORMULATION, SUPPLY AND USE (MFSU) OF COATINGS (PAINTS, VARNISHES AND VITREOUS ENAMELS), ADHESIVES, SEALANTS AND PRINTING INKS; wastes from MFSU and removal of paint and varnish; wastes not otherwise specified

Contaminated packaging

Dispose of contents/container in accordance with local regulation.

Solidify unexposed surplus and dispose of together with processed material as cured plastic waste.

SECTION 14: Transport information

Land transport (ADR/RID)

<u>14.1. UN number or ID number:</u>	UN 1760
<u>14.2. UN proper shipping name:</u>	CORROSIVE LIQUID, N.O.S. (methacrylic acid; 2-methylpropenoic acid)
<u>14.3. Transport hazard class(es):</u>	8
<u>14.4. Packing group:</u>	III
Hazard label:	8



Classification code:	C9
Special Provisions:	274
Limited quantity:	5 L
Excepted quantity:	E1
Transport category:	3
Hazard No:	80
Tunnel restriction code:	E

Inland waterways transport (ADN)

<u>14.1. UN number or ID number:</u>	UN 1760
<u>14.2. UN proper shipping name:</u>	CORROSIVE LIQUID, N.O.S. (methacrylic acid; 2-methylpropenoic acid)
<u>14.3. Transport hazard class(es):</u>	8

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14.4. Packing group:

Hazard label:

III

8



Classification code:

C9

Special Provisions:

274

Limited quantity:

5 L

Excepted quantity:

E1

Marine transport (IMDG)**14.1. UN number or ID number:**

UN 1760

14.2. UN proper shipping name:

CORROSIVE LIQUID, N.O.S. (methacrylic acid; 2-methylpropenoic acid)

14.3. Transport hazard class(es):

8

14.4. Packing group:

III

Hazard label:

8



Special Provisions:

223, 274

Limited quantity:

5 L

Excepted quantity:

E1

EmS:

F-A, S-B

Air transport (ICAO-TI/IATA-DGR)**14.1. UN number or ID number:**

UN 1760

14.2. UN proper shipping name:

CORROSIVE LIQUID, N.O.S. (methacrylic acid; 2-methylpropenoic acid)

14.3. Transport hazard class(es):

8

14.4. Packing group:

III

Hazard label:

8



Special Provisions:

A3 A803

Limited quantity Passenger:

1 L

Passenger LQ:

Y841

Excepted quantity:

E1

IATA-packing instructions - Passenger:

852

IATA-max. quantity - Passenger:

5 L

IATA-packing instructions - Cargo:

856

IATA-max. quantity - Cargo:

60 L

14.6. Special precautions for user

Handle in accordance with good industrial hygiene and safety practice. To avoid risks to man and the environment, comply with the instructions for use.

SECTION 15: Regulatory information

15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture**EU regulatory information**

Restrictions on use (REACH, annex XVII):

Entry 3, Entry 75

2010/75/EU (VOC):

16,56 % (182,16 g/l)

2004/42/EC (VOC):

23,33 % (256,63 g/l)

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Subcategory according to Directive 2004/42/EC:

Special finishes - All types, VOC limit value: 840 g/l

Information according to 2012/18/EU (SEVESO III):

Not subject to 2012/18/EU (SEVESO III)

Additional information

Other labelling like: Kosmetikverordnung

National regulatory information

Employment restrictions:

Observe restrictions to employment for juveniles according to the 'juvenile work protection guideline' (94/33/EC). Observe employment restrictions under the Maternity Protection Directive (92/85/EEC) for expectant or nursing mothers.

Water hazard class (D):

3 - highly hazardous to water

SECTION 16: Other information**Classification for mixtures and used evaluation method according to GB CLP Regulation**

Classification	Classification procedure
Skin Corr. 1A; H314	Calculation method
Eye Dam. 1; H318	Calculation method
Skin Sens. 1; H317	Calculation method
STOT SE 3; H335	Calculation method
Aquatic Chronic 3; H412	Calculation method

Relevant H and EUH statements (number and full text)

H302	Harmful if swallowed.
H312	Harmful in contact with skin.
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.
H335	May cause respiratory irritation.
H411	Toxic to aquatic life with long lasting effects.
H412	Harmful to aquatic life with long lasting effects.

Further Information

All data refer to the product upon delivery

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

In case of emergency call CHEMTREC 1-800-424-9300.

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