

SAFETY DATA SHEET

According to Regulation (EC) No. 1907/2006 (REACH) Article 31, Annex II as amended by Commission Regulation (EU) 2020/878

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

1.1 Product identifier

Product name:	DEGADUR® 527
Chemical name:	Solution of an acrylic polymer in methacrylic acid esters / acrylic acid esters
UFI:	U5E0-M0D2-700P-16QQ

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

Identified uses:	binder for floor-coating Roller application or brushing Hand-mixing with intimate contact and only PPE available Wide dispersive indoor use resulting in inclusion into or onto a matrix Wide dispersive outdoor use resulting in inclusion into or onto a matrix
Uses advised against:	None known.

1.3 Details of the supplier of the safety data sheet

Company Name	:	Röhm GmbH Product Stewardship Deutsche-Telekom-Allee 9 64295 Darmstadt
Telephone	:	+49 6151 863 7542
E-mail	:	sds-info@roehm.com

1.4 Emergency telephone number:

24-Hour Health Emergency	:	+49 6241 402 5280 (24h)
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SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

The product has been classified according to the legislation in force.

Classification according to Regulation (EC) No 1272/2008 as amended.

Physical Hazards

Flammable liquids	Category 2	H225: Highly flammable liquid and vapor.
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Health Hazards

Skin irritation	Category 2	H315: Causes skin irritation.
Skin sensitizer	Category 1	H317: May cause an allergic skin reaction.
Specific Target Organ Toxicity - Single Exposure	Category 3	H335: May cause respiratory irritation.

2.2 Label Elements



Signal Words:

Danger

Hazard Statement(s):

H225: Highly flammable liquid and vapor.
 H315: Causes skin irritation.
 H317: May cause an allergic skin reaction.
 H335: May cause respiratory irritation.

Precautionary Statements

Prevention:

P210: Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
 P233: Keep container tightly closed.
 P261: Avoid breathing dust/fume/gas/mist/vapors/spray.
 P262: Do not get in eyes, on skin, or on clothing.
 P280: Wear protective gloves/ eye protection/ face protection.

Response:

P333+P313: If skin irritation or rash occurs: Get medical advice/attention.

Hazardous ingredients which must be listed on the label:

methyl methacrylate
 2-ethylhexyl acrylate
 1,4-butanediol dimethacrylate
 n-butyl acrylate

2.3 Other hazards

The product is normally supplied in a stabilized form. If the permissible storage period and/or storage temperature is exceeded, the product may polymerize with heat evolution. Take precautionary measures against static discharges.

PBT/vPvB data

PBT: no, vPvB: no

Endocrine disrupting properties-Toxicity

The substance/mixture does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher.

Endocrine disrupting properties-Ecotoxicity

The substance/mixture does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher.

SECTION 3: Composition/information on ingredients

3.2 Mixtures

General information: Solution of an acrylic polymer in methacrylic acid esters / acrylic acid esters

Chemical name	Concentration	CAS-No.	EC No.	REACH Registration No.	M-Factor:	Notes
methyl methacrylate	50 - <70%	80-62-6	201-297-1	01-2119452498-28;	Aquatic Toxicity (Acute): 1; Aquatic Toxicity (Chronic): 1	#
2-ethylhexyl acrylate	7 - <13%	103-11-7	203-080-7	01-2119453158-37;	Aquatic Toxicity (Acute): 1; Aquatic Toxicity (Chronic): 1	
1,4-butanediol dimethacrylate	3 - <7%	2082-81-7	218-218-1	01-2119967415-30;	Aquatic Toxicity (Acute): 1; Aquatic Toxicity (Chronic): 1	
N,N-bis-(2-hydroxypropyl)-p-toluidine	1 - <2,5%	38668-48-3	254-075-1	01-2119980937-17;	Aquatic Toxicity (Acute): 1; Aquatic Toxicity (Chronic): 1	
(2-hydroxy-4-methoxyphenyl)	0,25 - <1%	131-57-7	205-031-5	01-2119976330-	Aquatic Toxicity	

l)phenyl-methanone				39;	(Acute): 1; Aquatic Toxicity (Chronic): 1	
n-butyl acrylate	0,1 - <1%	141-32-2	205-480-7	01-2119453155-43;	Aquatic Toxicity (Acute): 1; Aquatic Toxicity (Chronic): 1	#

* All concentrations are percent by weight unless ingredient is a gas. Gas concentrations are in percent by volume.

This substance has workplace exposure limit(s).

This substance is listed as SVHC.

Classification

Chemical name	Classification	Notes
methyl methacrylate	Classification: Flam. Liq.: 2: H225; Skin Irrit.: 2: H315; Skin Sens.: 1: H317; STOT SE: 3: H335; Supplemental label information: None known. Specific concentration limit: None known. Acute toxicity, oral: LD 50: > 5.000 mg/kg Acute toxicity, inhalation: LC 50: 29,8 mg/l Acute toxicity, dermal: LD 50: > 5.000 mg/kg	Note D
2-ethylhexyl acrylate	Classification: Skin Irrit.: 2: H315; Skin Sens.: 1B: H317; STOT SE: 3: H335; Aquatic Chronic: 3: H412; Supplemental label information: None known. Specific concentration limit: None known. Acute toxicity, oral: LD 50: 4.435 mg/kg Acute toxicity, inhalation: None known. Acute toxicity, dermal: LD 50: 7.522 mg/kg	Note D
1,4-butanediol dimethacrylate	Classification: Skin Sens.: 1B: H317; Supplemental label information: None known. Specific concentration limit: None known. Acute toxicity, oral: LD 50: > 5.000 mg/kg Acute toxicity, inhalation: None known. Acute toxicity, dermal: LD 50: > 3.000 mg/kg	None.
N,N-bis-(2-hydroxypropyl)-p-toluidine	Classification: Acute Tox.: 2: H300; Eye Irrit.: 2: H319; Aquatic Chronic: 3: H412; Supplemental label information: None known.	None.

	<p>Specific concentration limit: None known.</p> <p>Acute toxicity, oral: LD 50: 25 mg/kg</p> <p>Acute toxicity, inhalation: None known.</p> <p>Acute toxicity, dermal: LD 50: > 2.000 mg/kg</p>	
(2-hydroxy-4-methoxyphenyl)phenylmethanone	<p>Classification: Aquatic Acute: 1: H400; Aquatic Chronic: 2: H411;</p> <p>Supplemental label information: None known.</p> <p>Specific concentration limit: None known.</p> <p>Acute toxicity, oral: LD 50: > 12.800 mg/kg</p> <p>Acute toxicity, inhalation: None known.</p> <p>Acute toxicity, dermal: LD 50: > 16.000 mg/kg</p>	None.
n-butyl acrylate	<p>Classification: Flam. Liq.: 3: H226; Acute Tox.: 4: H332; Skin Irrit.: 2: H315; Eye Irrit.: 2: H319; Skin Sens.: 1B: H317; STOT SE: 3: H335; Aquatic Chronic: 3: H412;</p> <p>Supplemental label information: None known.</p> <p>Specific concentration limit: None known.</p> <p>Acute toxicity, oral: LD 50: 3.150 mg/kg</p> <p>Acute toxicity, inhalation: LC 50: 10,3 mg/l</p> <p>Acute toxicity, dermal: LD 50: > 2.000 mg/kg</p>	Note D

CLP: Regulation No. 1272/2008.
 The full text for all H-statements is displayed in section 16.

SECTION 4: First aid measures

4.1 Description of first aid measures

General information:

Take off all contaminated clothing immediately. Medical treatment is necessary if symptoms occur which are obviously caused by skin or eye contact with the product or by inhalation of its vapours.

Inhalation:

Move subject to fresh air and keep him calm. If feeling unwell seek medical advice.

Skin Contact:

IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water [or shower]. Wash contaminated clothing before reuse. If skin irritation occurs consult a physician.

Eye contact:

Rinse thoroughly with plenty of water, also under the eyelids. In case of complaints get medical advice.

Ingestion:

Do not induce vomiting. Call a physician immediately. Never give anything by mouth to an unconscious person.

Personal Protection for First-aid Responders:

First Aid responders should pay attention to self-protection and use the recommended protective clothing

4.2 Most important symptoms and effects, both acute and delayed

Symptoms:

Excessive or prolonged exposure can cause the following:
 Headache. confusion Irritation Product
 has dermal defatting effect

Hazards:

May cause sensitization by skin contact.

4.3 Indication of immediate medical attention and special treatment needed



Treatment:

No specific antidote known. Treat symptomatically.

SECTION 5: Firefighting measures

General Fire Hazards:

Vapours are heavier than air and can form an explosive mixture with air. Flammable liquid. Vapors can travel to a source of ignition and flash back. Explosive mixtures may occur at temperatures at or above the flashpoint.
 Remove sources of ignition. Also keep emptied containers away from sources of heat and ignition. Keep out unprotected persons. In case of fire, remove the endangered barrels and bring to a safe place, if this can be done safely. Containers exposed to heat (fire) may build up pressure. Cool by splashing with water. 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. Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

5.1 Extinguishing media

Suitable extinguishing media:

foam , Carbon dioxide, sprinkler system with water, Dry chemical.

Unsuitable extinguishing media:

High volume water jet

5.2 Special hazards arising from the substance or mixture:

May be released in case of fire: carbon monoxide, carbon dioxide, organic products of decomposition. Closed container may rupture if strongly heated. Vapours may form explosive mixtures with air. Combustible air-vapour mixtures are heavier than the air and spread along the floor. Ignition from a considerable distance is possible.

5.3 Advice for firefighters

Special fire-fighting procedures:

Keep away from sources of ignition - No smoking. Vapors are heavier than air. Flammable liquid. Vapors can travel to a source of ignition and flash back. Explosive mixtures may occur at temperatures at or above the flashpoint.
 Take action to prevent static discharges. Use explosion-proof equipment. In the event of fire, cool the endangered containers with water. Fire fighting must be carried out from a safe distance.

Special protective equipment for fire-fighters:

Wear self-contained breathing apparatus.

SECTION 6: Accidental release measures

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|---|---|
| 6.1 Personal precautions, protective equipment and emergency procedures: | Assure sufficient ventilation. Use personal protective clothing. Use breathing apparatus if exposed to vapours/dust/mist/aerosol. Keep away from open flames, hot surfaces and sources of ignition. Vapours can form explosive mixtures with air. Keep out unprotected persons. Avoid spark generation. |
| 6.1.1 For non-emergency personnel: | Remove sources of ignition. Stop leak if you can do so without risk. Assure sufficient ventilation. |
| 6.1.2 For emergency responders: | Use water SPRAY only to cool containers! Do not put water on leaked material. |
| 6.2 Environmental Precautions: | Prevent product from getting into drains/surface water/groundwater. |
| 6.3 Methods and material for containment and cleaning up: | Larger quantities: Remove mechanically (by pumping). Use explosion-proof equipment! Smaller quantities and/or residues: Contain with absorbent material (e.g. sand, diatomaceous earth, acid absorbent, universal absorbent or sawdust). Dispose of in accordance with regulations. |
| 6.4 Reference to other sections: | For personal protection see section 8. For disposal considerations see section 13. |

SECTION 7: Handling and storage

7.1 Precautions for safe handling

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|---------------------------------|---|
| Technical measures: | Provide good ventilation or extraction. |
| Local/Total ventilation: | Provide a good standard of general or controlled ventilation (5 to 10 air changes per hour) |
| Safe handling advice: | <p>Keep away from sources of ignition - No smoking. Vapors are heavier than air. Flammable liquid. Vapors can travel to a source of ignition and flash back. Explosive mixtures may occur at temperatures at or above the flashpoint.</p> <p>Take action to prevent static discharges. Use explosion-proof equipment. In the event of fire, cool the endangered containers with water. Fire fighting must be carried out from a safe distance. Wash hands before breaks and immediately after handling the product. Safety shower and eye wash fountain should be available. When using do not eat, drink or smoke. Avoid inhalation, ingestion and contact with skin and eyes. Provide sufficient ventilation and exhaust at the workplace. Provide good room ventilation even at ground level (vapours are heavier than air). Keep container tightly closed. Open drum carefully as content may be under pressure. Keep away from heat/sparks/open flames/hot surfaces. No smoking. Provide adequate precautions, such as electrical grounding and bonding, or inert atmospheres. Wash thoroughly after handling. Supervision in place to</p> |

check that the risk management measures in place are being used correctly and operation conditions followed. Persons susceptible to skin sensitisation problems or asthma, allergies, chronic or recurrent respiratory disease should not be employed in any process in which this mixture is being used. Control staff entry to working area. Training for staff on good practice. Recording of any 'near miss' situations. Regular cleaning of equipment and work area.

Contact avoidance measures: see section 8.

7.2 Conditions for safe storage, including any incompatibilities

Safe storage conditions:

Keep away from direct sunlight. Keep away from open flames, hot surfaces and sources of ignition. Keep away from heat. Protect from the action of light. Keep containers tightly closed in a cool, well-ventilated place. Fill the container by approximately 90 % only as oxygen (air) is required for stabilisation. With large storage containers make sure the oxygen (air) supply is sufficient to ensure stability. Keep locked up. Keep only in the original container at a temperature not exceeding 30 °C.

Safe packaging materials: No data available.

7.3 Specific end use(s): Applications; see Section 1.

SECTION 8: Exposure controls/personal protection

8.1 Control Parameters

Occupational Exposure Limits

Chemical name	Type	Form of exposure	Exposure Limit Values		Source
methyl methacrylate	STEL 15 minutes		100 ppm		ELV (IE) (2018)
	TWA		50 ppm		ELV (IE) (2016)
	TWA		50 ppm		EU ELV (02 2017)
n-butyl acrylate	STEL		100 ppm		EU ELV (02 2017)
	STEL		10 ppm	53 mg/m ³	EU ELV (12 2009)
	TWA		2 ppm	11 mg/m ³	EU ELV (12 2009)
	TWA		2 ppm	11 mg/m ³	ELV (IE) (01 2020)
	STEL 15 minutes		10 ppm	53 mg/m ³	ELV (IE) (01 2020)

Please refer to the latest edition of the appropriate source text and consult an industrial hygienist or similar professional, or local agencies, for further information.

Biological Limit Values

No biological exposure limits noted for the ingredient(s).

DNEL-Values

Remarks: DNEL-Values

Critical component	Type	Route of Exposure	Health Warnings	Remarks
methyl methacrylate	Workers	Inhalation	208 mg/m ³	Long-term - systemic effects

	Workers	Dermal	13,7 mg/kg/d	Long-term - systemic effects
	Workers	Inhalation	416 mg/m ³	Short-term exposure
	Workers	Dermal	1,500 µg/cm ²	Short-term exposure
	Consumers	Inhalation	74,3 mg/m ³	Long-term - systemic effects
	Consumers	Dermal	8,2 mg/kg/d	Long-term - systemic effects
	Consumers	Oral	8,2 mg/kg/d	Long-term - systemic effects
	Consumers	Inhalation	208 mg/m ³	Short-term exposure
2-ethylhexyl acrylate	Workers	Inhalation	37,5 mg/m ³	Long-term - local effects
	Workers	Dermal	0,242 mg/cm ²	Long-term - local effects
1,4-butanediol dimethacrylate	Workers	Inhalation	14,5 mg/m ³	Long-term - systemic effects
	Workers	Dermal	4,2 mg/kg bodyweight/day	Long-term - systemic effects

PNEC-Values

Remarks: PNEC-Values

Critical component	Environmental compartment	PNEC-Values	Remarks
methyl methacrylate	Fresh water	0,94 mg/l	
	freshwater sediment	10,2 mg/kg dry weight	
	marine water	0,094 mg/l	
	marine water sediment	1,02 mg/kg dry weight	
	soil	1,48 mg/kg dry weight	
	sewage treatment plant (STP)	10 mg/l	
	Humans via the environment	8,2 mg/kg bw/day	
2-ethylhexyl acrylate	Fresh water	0,002727 mg/l	
	marine water	0,000272 mg/l	
	freshwater sediment	0,126 mg/kg	
	Marine sediments	0,126 mg/kg	
	soil	1 mg/kg	
	sewage treatment plant (STP)	2,3 mg/l	
1,4-butanediol dimethacrylate	Fresh water	0,087 mg/l	
	marine water	0,0087 mg/l	
	sewage treatment plant (STP)	20 mg/l	
	soil	0,573 mg/kg	
	freshwater sediment	3,12 mg/kg	
	marine water sediment	0,312 mg/kg	

8.2 Exposure controls

Appropriate Engineering Controls:

For monitoring procedures refer for instance to "Empfohlene Analysenverfahren für Arbeitsplatzmessungen", Schriftenreihe der Bundesanstalt für Arbeitsschutz and "NIOSH Manual of Analytical Methods", National Institute for Occupational Safety and Health

Individual protection measures, such as personal protective equipment

Eye/face protection:

Tightly fitting safety goggles

Hand Protection:

Material: butyl rubber gloves
Break-through time: 60 min
Glove thickness: 0,7 mm
Guideline: EN 374

Additional Information: Gloves should be replaced regularly, especially after extended contact with the product., For each work-place a suitable glove type has to be selected.

Skin and Body Protection:	On handling of larger quantities: face mask, chemical-resistant boots and apron
Respiratory Protection:	Breathing apparatus in case of high concentrations if the limit values like TLV are exceeded, when vapours or aerosols occur Respirator with filter for organic vapour short term: filter appliance, filter A
Hygiene measures:	Take off all contaminated clothing immediately. Store work clothing separately. Follow the usual good standards of occupational hygiene. Clean skin thoroughly after work; apply skin cream.
Environmental Controls:	see section 6.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

Appearance

Physical state:	liquid
Form:	liquid
Color:	Blue
Odor:	ester-like
Odor Threshold:	< 1 ppm
Freezing point:	-48 °C (methyl methacrylate)

Paraffin Separation < 15°C

Boiling Point:	approx. 100 °C @ 1.013 hPa Method: estimated (methyl methacrylate)
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Flammability: Highly flammable liquid and vapor.

Upper/lower limit on flammability or explosive limits

Explosive limit - upper:	Method: estimated 12,5 %(V) (methyl methacrylate)
Explosive limit - lower:	Method: estimated 2,1 %(V) (methyl methacrylate) at 10,5°C

Flash Point:	10 °C Method: estimated (methyl methacrylate)
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Auto-ignition temperature:	approx. 430 °C Method: estimated (methyl methacrylate)
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Decomposition Temperature: No decomposition if used as directed.

pH: approx.

7
 Concentration: 1 %

Viscosity

Dynamic viscosity: approx.
 175 mPa.s @ 23 °C
 Method: Brookfield

Kinematic viscosity: approx.
 175 mm²/s @ 23 °C ,
 Method: calculated

Flow Time: not determined

Solubility(ies)

Solubility in Water: approx.
 20 g/l @ 20 °C

Solubility (other): soluble in ethyl acetate

Dissolution Rate: no specific test data available

Partition coefficient (n-octanol/water): 0,7
 Method: estimated
 (methyl methacrylate)

Dispersion Stability: Not applicable

Vapor pressure: approx.
 40 hPa @ 20 °C

Relative density: <
 1
 estimated

Density: 0,989 g/cm³ @ 20 °C
 Method: DIN 51757

Bulk density: Not applicable

Relative vapor density: >
 1 @ 20 °C

9.2 Other information

Self-ignition: not spontaneously flammable in air at ambient temperature
 (not pyrophoric)

Evaporation Rate: >
 1
 (butyl acetate = 1)

SECTION 10: Stability and reactivity

10.1 Reactivity: polymerisation

10.2 Chemical Stability: No decomposition if used as directed.

10.3 Possibility of hazardous reactions: Polymerization with heat evolution may occur in the presence of radical forming substances (e.g. peroxides), reducing substances, and/or heavy metal ions.

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|------|--|--|
| 10.4 | Conditions to avoid: | Heat and ignition sources, aging, contamination, oxygen free atmosphere. If the permissible storage period and/or storage temperature is exceeded, the product may polymerize with heat evolution. |
| 10.5 | Incompatible Materials: | Reducing agents. Tertiary amines. Heavy metals. Peroxides. Free radical initiators. Oxidizing agents. Mineral Acid |
| 10.6 | Hazardous Decomposition Products: | None when used as directed. |

SECTION 11: Toxicological information

General information: Properties of components in summary.

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

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|----------------------|---|
| Inhalation: | Relevant route of exposure. Information on effects are given below. |
| Skin Contact: | Relevant route of exposure. Information on effects are given below. |
| Eye contact: | Relevant route of exposure. Information on effects are given below. |
| Ingestion: | If handled correctly, not a relevant route of exposure. Information on effects are given below. |

Symptoms related to the physical, chemical and toxicological characteristics

- | | |
|----------------------|---|
| Inhalation: | Headache. Dizziness. |
| Skin Contact: | Causes skin irritation. May cause allergic skin reaction. |
| Eye contact: | Causes serious eye irritation. |
| Ingestion: | If handled correctly, not a relevant route of exposure. Information on effects are given below. |

Acute toxicity (list all possible routes of exposure)

Oral

- | | |
|--|--|
| Product: | Acute toxicity estimate, > 2.000 mg/kg, Calculation method |
| Components: | |
| methyl methacrylate | LD 50, Rat, > 5.000 mg/kg, OECD Test Guideline 401 |
| 2-ethylhexyl acrylate | LD 50, Rat, male/female, 4.435 mg/kg, OECD Test Guideline 401 |
| 1,4-butanediol dimethacrylate | LD 50, Rat, > 5.000 mg/kg, OECD Test Guideline 401, Own test result. |
| N,N-bis-(2-hydroxypropyl)-p-toluidine | LD 50, Rat, male/female, 25 mg/kg, OECD Test Guideline 423 |
| (2-hydroxy-4-methoxyphenyl)phenylmethanone | LD 50, Rat, > 12.800 mg/kg, OECD Guide-line 401
Not toxic after single exposure |
| n-butyl acrylate | LD 50, Rat, 3.150 mg/kg, OECD Guide-line 401 |

Dermal

- | | |
|---------------------|---|
| Product: | ATEmix, > 5.000 mg/kg, Calculation method |
| Components: | |
| methyl methacrylate | LD 50, Rabbit, > 5.000 mg/kg |

2-ethylhexyl acrylate	LD 50, Rabbit, 7.522 mg/kg
1,4-butanediol dimethacrylate	LD 50, Rabbit, > 3.000 mg/kg, Not toxic after single exposure
N,N-bis-(2-hydroxypropyl)-p-toluidine	LD 50, Rat, male/female, > 2.000 mg/kg, OECD Guide-line 402, Not toxic after single exposure
(2-hydroxy-4-methoxyphenyl)phenylmethanone	Not toxic after single exposure
n-butyl acrylate	LD 50, Rabbit, > 16.000 mg/kg, OECD Guide-line 402
	Not toxic after single exposure
	LD 50, Rabbit, male, > 2.000 mg/kg, Not toxic after single exposure

Inhalation

Product:	ATEmix, > 20 mg/l, Calculation method, Vapour
Components:	
methyl methacrylate	LC 50, Rat, 4 h, 29,8 mg/l, Vapour
	Not toxic after single exposure, Dust and mist, Not applicable
2-ethylhexyl acrylate	Not toxic after single exposure, Not classified based on available information., Vapour
	Not toxic after single exposure, Not classified based on available information., Dust and mist
1,4-butanediol dimethacrylate	Not toxic after single exposure, No labelling required, Vapour
N,N-bis-(2-hydroxypropyl)-p-toluidine	Not toxic after single exposure, No labelling required, Dust and mist
	Not toxic after single exposure, The substance or mixture has no acute inhalation toxicity, Dust and mist
	Not toxic after single exposure, The substance or mixture has no acute inhalation toxicity, Vapour
(2-hydroxy-4-methoxyphenyl)phenylmethanone	Not toxic after single exposure, Vapour, Not classified based on available information.
	Not toxic after single exposure, Dust and mist, Not classified based on available information.
n-butyl acrylate	LC 50, Rat, 4 h, 10,3 mg/l, OECD Test Guideline 403, Vapour
	Not toxic after single exposure, Not classified based on available information., Dust and mist

Repeated dose toxicity

Product:	No toxicological tests have been conducted with the product itself.
Components:	
methyl methacrylate	NOAEL Rat, Inhalativ, 2 yr, 25 ppm , Findings: Damage to mucous membranes in the nose at 400 ppm
	NOAEL Rat, Oral, 2 yr, 2000 ppm , Findings: no toxic effects
2-ethylhexyl acrylate	No data available.
1,4-butanediol dimethacrylate	NOAEL Rat, Oral, 300 mg/kg
N,N-bis-(2-hydroxypropyl)-p-toluidine	No data available.
(2-hydroxy-4-methoxyphenyl)phenylmethanone	The available data do not suffice for classification.
n-butyl acrylate	No data available.

Skin Corrosion/Irritation

Product:	May cause skin irritation.
Components:	
methyl methacrylate	Rabbit, 4 h, not irritating
	Irritating., Human, Based on experience in human subjects
2-ethylhexyl acrylate	Irritating., Irritating.
1,4-butanediol dimethacrylate	Non-Irritating, FDA 1959 Draize, occlusive, Rabbit, 24 h, Not irritating, Own test result.

N,N-bis-(2-hydroxypropyl)-p-toluidine	Non-Irritating, OECD 404, Rabbit, Not irritating
(2-hydroxy-4-methoxyphenyl)phenyl-methanone	OECD Guide-line 404, Rabbit, does not require labelling
n-butyl acrylate	Irritating., in vivo, Rabbit, Irritating., source: literature

Serious Eye Damage/Eye Irritation

Product:	Based on available data, the classification criteria are not met.
Components:	
methyl methacrylate	Non-Irritating, OECD 405, FDA 1959 Draize, Rabbit
2-ethylhexyl acrylate	Non-Irritating
1,4-butanediol dimethacrylate	Non-Irritating, OECD Test Guideline 405, Rabbit, Own test result.
N,N-bis-(2-hydroxypropyl)-p-toluidine	Moderately irritating, OECD Test Guideline 405, Rabbit
(2-hydroxy-4-methoxyphenyl)phenyl-methanone	Non-Irritating, OECD Guide-line 405, Rabbit
n-butyl acrylate	Irritating., in vivo, Rabbit

Respiratory or Skin Sensitization

Product:	May cause an allergic skin reaction.
Components:	
methyl methacrylate	Local Lymph Node Assay (LLNA), LLNA (OECD 429), Mouse, May cause sensitization by skin contact. Cases of sensitisation also observed in humans. Not classified for respiratory sensitization
2-ethylhexyl acrylate	Skin sensitizer Not classified for respiratory sensitization
1,4-butanediol dimethacrylate	Local Lymph Node Assay (LLNA), OECD Test Guideline 429, Mouse, Sensitising, Own test result.
N,N-bis-(2-hydroxypropyl)-p-toluidine	in vivo, OECD 406, Guinea Pig, Not a skin sensitizer.
(2-hydroxy-4-methoxyphenyl)phenyl-methanone	Not classified for respiratory sensitization
n-butyl acrylate	Maximization Test (GPMT), Guinea Pig, Not a skin sensitizer. Local Lymph Node Assay (LLNA), OECD 429, Mouse, Skin sensitizer Not classified for respiratory sensitization

Carcinogenicity

Product:	Contains no ingredient listed as a carcinogen (>0.1%).
Components:	
methyl methacrylate	Not classified Non-carcinogenic in inhalation and feeding studies carried out on rats, mice and dogs.
2-ethylhexyl acrylate	Not classified
1,4-butanediol dimethacrylate	Not classified
N,N-bis-(2-hydroxypropyl)-p-toluidine	Not classified
(2-hydroxy-4-methoxyphenyl)phenyl-methanone	Not classified
n-butyl acrylate	Not classified

Germ Cell Mutagenicity

Contains no ingredient listed as a mutagen (>0.1%).

In vitro

Product: No toxicological tests have been conducted with the product itself.

Components:

methyl methacrylate
 gene mutation, OECD 471: , negative
 gene mutation, OECD 476: , negative, , Chinese hamster lung fibroblasts (V79)
 Micronucleus test, OECD 487: , negative, , human lymphocytes

2-ethylhexyl acrylate
 No data available.

1,4-butanediol
 dimethacrylate
 gene mutation, OECD TG 471: , negative

N,N-bis-(2-hydroxypropyl)-p-toluidine
 Bacterial reverse mutation assay, OECD TG 471: , negative

(2-hydroxy-4-methoxyphenyl)phenyl-methanone
 Not classified

n-butyl acrylate
 gene mutation, Ames-test: , negative
 gene mutation, HGPRT test: , negative, , CHO-cells
 gene mutation, mouse lymphoma test: , positive, , mouse lymphoma L5178Y cells The data are derived from the evaluations or test results achieved with similar products (conclusion by analogy).
 Chromosomal aberration: , negative, CHO-cells
 Based on available data, the classification criteria are not met.

In vivo

Product: No toxicological tests have been conducted with the product itself.

Components:

methyl methacrylate
 gene mutation, Dominant lethal test, Inhalation, Mouse, negative

2-ethylhexyl acrylate
 No data available.

1,4-butanediol
 dimethacrylate
 Chromosomal aberration, OECD TG 474, Oral, Mouse, negative

N,N-bis-(2-hydroxypropyl)-p-toluidine
 Ames test, negative

(2-hydroxy-4-methoxyphenyl)phenyl-methanone
 Not classified

n-butyl acrylate
 gene mutation, OECD Test Guideline 488, Oral, Mouse, negative, The data are derived from the evaluations or test results achieved with similar products (conclusion by analogy).
 Chromosomal aberration, OECD Test Guideline 475, Inhalation, Chinese hamster, negative
 Chromosomal aberration, OECD Test Guideline 475, Inhalation, Rat, negative

Reproductive toxicity

Product: Contains no ingredient listed as toxic to reproduction (>0.1%).

Components:

methyl methacrylate
 Not classified No indications of toxic effects were observed in reproduction studies in animals. OECD 414 OECD 416 Oral

2-ethylhexyl acrylate
 Not classified

1,4-butanediol
 Not classified

dimethacrylate

N,N-bis-(2-hydroxypropyl)-p-toluidine	Not classified
(2-hydroxy-4-methoxyphenyl)phenyl-methanone	Animal testing did not show any effects on fertility.
n-butyl acrylate	Not classified Oral

Specific Target Organ Toxicity - Single Exposure

Product: May cause respiratory irritation.

Components:

methyl methacrylate	Inhalation - vapor, Category 3 with respiratory tract irritation.
2-ethylhexyl acrylate	Inhalation - vapor, Category 3 with respiratory tract irritation.
1,4-butanediol dimethacrylate	Not classified
N,N-bis-(2-hydroxypropyl)-p-toluidine	Not classified
(2-hydroxy-4-methoxyphenyl)phenyl-methanone	Not classified based on available information.
n-butyl acrylate	Inhalation - vapor, Category 3 with respiratory tract irritation.

Specific Target Organ Toxicity - Repeated Exposure

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

Components:

methyl methacrylate	Not classified
2-ethylhexyl acrylate	Not classified
1,4-butanediol dimethacrylate	Not classified, no evidence for hazardous properties
N,N-bis-(2-hydroxypropyl)-p-toluidine	Not classified
(2-hydroxy-4-methoxyphenyl)phenyl-methanone	Not classified
n-butyl acrylate	Not classified

Aspiration Hazard

Product: Not relevant.

Components:

methyl methacrylate	Not classified
2-ethylhexyl acrylate	Not classified
1,4-butanediol dimethacrylate	Not classified
N,N-bis-(2-hydroxypropyl)-p-toluidine	Not classified
(2-hydroxy-4-methoxyphenyl)phenyl-methanone	Not classified
n-butyl acrylate	Not classified

11.2 Information on other hazards

Endocrine disrupting properties

Product:	The substance/mixture does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher.;
Components:	
methyl methacrylate	The substance/mixture does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher.;
2-ethylhexyl acrylate	The substance/mixture does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher.;
1,4-butanediol dimethacrylate	The substance/mixture does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher.;
N,N-bis-(2-hydroxypropyl)-p-toluidine	The substance/mixture does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher.;
(2-hydroxy-4-methoxyphenyl)phenyl-methanone	The substance/mixture does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher.;
n-butyl acrylate	The substance/mixture does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher.;

Other information

Product:	There are no toxicological data available for the product as such. Avoid contact with the skin and eyes and inhalation of the product vapours.;
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SECTION 12: Ecological information

12.1 Toxicity:

Acute hazards to the aquatic environment:

Fish

Product:	No data available.
Components:	
methyl methacrylate	LC 50, 96 h, > 100 mg/IOECD 203, Expert judgement
2-ethylhexyl acrylate	LC 50, Salmo gairdneri, 96 h, 4,6 mg/l LC 50, Oncorhynchus mykiss (rainbow trout), 96 h, 1,81 mg/IOECD TG 203
1,4-butanediol dimethacrylate	LC 50, Leuciscus idus melanotus, 48 h, 32,5 mg/IDIN 38412 Teil 15, The data are derived from the evaluations or test results achieved with similar products (conclusion by analogy). Own test result.

N,N-bis-(2-hydroxypropyl)-p-toluidine

LC 50, Danio rerio (zebra fish), 96 h, 17 mg/l

(2-hydroxy-4-methoxyphenyl)phenyl-methanone
n-butyl acrylate

LC 50, Leuciscus idus (Golden orfe), 96 h, 100 - 220 mg/l DIN 38412 Teil 15, The reported toxic effects relate to the nominal concentration.
LC 50, Medaka, high-eyes (*Oryzias latipes*), 96 h, 3,8 mg/l analogy OECD
LC 50, *Oncorhynchus mykiss* (rainbow trout), 96 h, > 5,2 mg/l OECD TG 203

Aquatic Invertebrates

Product:

No data available.

Components:

methyl methacrylate

EC 50, *Daphnia magna* (Water flea), 48 h, 69 mg/l OECD 202

2-ethylhexyl acrylate

EC 50, *Daphnia magna* (Water flea), 48 h, 1,3 mg/l

1,4-butanediol

No data available.

dimethacrylate

N,N-bis-(2-hydroxypropyl)-p-toluidine

EC 50, *Daphnia magna* (Water flea), 48 h, 28,8 mg/l OECD TG 202

(2-hydroxy-4-methoxyphenyl)phenyl-

methanone

EC50, *Daphnia magna* (Water flea), 24 h, 12,9 mg/l Directive 84/449/EEC, C.2, The product has low solubility in the test medium. An aqueous dispersion was tested. The reported toxic effects relate to the nominal concentration.

n-butyl acrylate

EC 50, *Daphnia magna* (Water flea), 48 h, 1,87 mg/l Analogy OECD-method

EC 50, *Daphnia magna* (Water flea), 48 h, 8,2 mg/l OECD TG 202

Toxicity to Aquatic Plants

Product:

No data available.

Components:

methyl methacrylate

EC 50, *Selenastrum capricornutum* (green algae), 72 h, > 100 mg/l, OECD 201

2-ethylhexyl acrylate

NOEC, *Selenastrum capricornutum* (green algae), 72 h, > 110 mg/l, OECD 201

1,4-butanediol

EC 50, *Desmodesmus subspicatus* (green algae), 72 h, 1,71 mg/l, OECD TG 201

dimethacrylate

NOEC, *Desmodesmus subspicatus*, 0,45 mg/l

N,N-bis-(2-hydroxypropyl)-p-toluidine

EC 50, *Desmodesmus subspicatus* (green algae), 72 h, 9,79 mg/l, OECD 201, Own study

(2-hydroxy-4-methoxyphenyl)phenyl-

methanone

EC 50, *Desmodesmus subspicatus* (green algae), 72 h, 245 mg/l, OECD TG 201

EC 50, *Desmodesmus subspicatus* (green algae), 72 h, 1,4 mg/l, The product has low solubility in the test medium. An aqueous dispersion was tested. The reported toxic effects relate to the nominal concentration.

n-butyl acrylate

EC 50, *Pseudokirchneriella subcapitata* (green algae), 72 h, 0,67 mg/l, OECD TG 201

NOEC, *Pseudokirchneriella subcapitata* (green algae), 72 h, 0,18 mg/l, OECD TG 201

EC 50, *Selenastrum capricornutum* (green algae), 96 h, 2,65 mg/l, OECD TG 201

Toxicity to microorganisms

Product:

No data available.

Components:

methyl methacrylate

EC3, *Pseudomonas putida*, 16 h, 100 mg/l, cell proliferation inhibition test, Bringmann-Kühn

2-ethylhexyl acrylate

No data available.

1,4-butanediol

NOEC, local activated sludge, 20 mg/l

dimethacrylate

N,N-bis-(2-hydroxypropyl)-p-toluidine	EC10, 30 min, > 1.995 mg/l, OECD Test Guideline 209
(2-hydroxy-4-methoxyphenyl)phenyl-methanone	EC 50, Activated sludge, 3 h, > 100 mg/l, Directive 87/302/EEC, part C, p. 118
n-butyl acrylate	EC0, Activated sludge, 3 d, > 150 mg/l

Chronic hazards to the aquatic environment:

Fish

Product:	No data available.
Components:	
methyl methacrylate	NOEC, Danio rerio (zebra fish), 9,4 mg/l, OECD 210
2-ethylhexyl acrylate	NOEC, Salmo salar (Atlantic salmon), 21 d, 0,78 mg/l
1,4-butanediol	No data available.
dimethacrylate	
N,N-bis-(2-hydroxypropyl)-p-toluidine	No data available.
(2-hydroxy-4-methoxyphenyl)phenyl-methanone	No data available.
n-butyl acrylate	No data available.

Aquatic Invertebrates

Product:	No data available.
Components:	
methyl methacrylate	NOEC, Daphnia magna (Water flea), 21 d, 37 mg/l, OECD 202 part 2
2-ethylhexyl acrylate	NOEC, Daphnia magna (Water flea), 21 d, 0,19 mg/l, US-EPA-method EC 50, Daphnia magna (Water flea), 21 d, 0,5 mg/l, US-EPA-method EC 10, Daphnia magna, 21 d, 7,51 mg/l, OECD TG 211
1,4-butanediol	
dimethacrylate	
N,N-bis-(2-hydroxypropyl)-p-toluidine	No data available.
(2-hydroxy-4-methoxyphenyl)phenyl-methanone	No data available.
n-butyl acrylate	NOEC, Daphnia magna (Water flea), 21 d, 0,136 mg/l, OECD Test Guideline 211

Toxicity to microorganisms

Product:	No data available.
Components:	
methyl methacrylate	EC3, Pseudomonas putida, 16 h, 100 mg/l, cell proliferation inhibition test, Bringmann-Kühn
2-ethylhexyl acrylate	No data available.
1,4-butanediol	NOEC, local activated sludge, 20 mg/l
dimethacrylate	
N,N-bis-(2-hydroxypropyl)-p-toluidine	EC10, 30 min, > 1.995 mg/l, OECD Test Guideline 209
(2-hydroxy-4-methoxyphenyl)phenyl-methanone	EC 50, Activated sludge, 3 h, > 100 mg/l, Directive 87/302/EEC, part C, p. 118
n-butyl acrylate	EC0, Activated sludge, 3 d, > 150 mg/l

12.2 Persistence and Degradability

Biodegradation

Product:	(monomer constituent), The product is biodegradable.
Components:	
methyl methacrylate	94 %, 14 d, OECD 301 C, easily biodegradable
2-ethylhexyl acrylate	70 - 80 %, 15 d, Readily biodegradable
1,4-butanediol dimethacrylate	84 %, 28 d, OECD 310, Own study, Readily biodegradable
N,N-bis-(2-hydroxypropyl)-p-toluidine	39 %, 28 d, OECD TG 301 B, Inherently biodegradable
(2-hydroxy-4-methoxyphenyl)phenyl-methanone	60 - 70 %, 28 d, OECD TG 301 F / ISO 9408, aerobic, Not readily degradable.
n-butyl acrylate	60 %, source: literature, Readily biodegradable > 80 %, Readily biodegradable

12.3 Bioaccumulative potential

Bioconcentration Factor (BCF)

Product:	no evidence for hazardous properties
Components:	
methyl methacrylate	Accumulation in organisms is not expected due to the coefficient of distribution of n-octanol in water (log Pow).
2-ethylhexyl acrylate	282,4
1,4-butanediol dimethacrylate	Significant accumulation in organisms is not expected due to the coefficient of distribution of n-octanol in water (log Pow).
N,N-bis-(2-hydroxypropyl)-p-toluidine	No data available.
(2-hydroxy-4-methoxyphenyl)phenyl-methanone	Cyprinus carpio (Carp), 33 - 156, Accumulation in aquatic organisms is expected. Accumulation in terrestrial organisms is expected.
n-butyl acrylate	Accumulation in organisms is not expected due to the coefficient of distribution of n-octanol in water (log Pow).

Partition Coefficient n-octanol / water (log Kow)

Product:	0,7, estimated, (methyl methacrylate)
Components:	
methyl methacrylate	1,38, 20 °C, Measured
2-ethylhexyl acrylate	4,64, 25 °C
1,4-butanediol dimethacrylate	3,1, OECD Test Guideline 117, Own study
N,N-bis-(2-hydroxypropyl)-p-toluidine	2,1, OECD Test Guideline 107
(2-hydroxy-4-methoxyphenyl)phenyl-methanone	3,52, 25 °C
n-butyl acrylate	2,36 2,38, 25 °C

12.4 Mobility in soil:

Product:	no specific test data available
Components:	
methyl methacrylate	Binding to the solid soil phase, sediment or clarification sludge is not expected. The substance evaporates gradually into the atmosphere from the surface of the water. If the substance does get into the environment, it tends to remain in the compartment it was discharged into.
2-ethylhexyl acrylate	No data available.
1,4-butanediol dimethacrylate	No data available.

N,N-bis-(2-hydroxypropyl)-p-
 toluidine No data available.
 (2-hydroxy-4-
 methoxyphenyl)phenyl-
 methanone No data available.
 n-butyl acrylate The product evaporates slowly.

12.5 Results of PBT and vPvB assessment:

Product:	PBT: no vPvB: no
Components:	
methyl methacrylate	Non-classified vPvB substance, Non-classified PBT substance
2-ethylhexyl acrylate	Non-classified vPvB substance Non-classified PBT substance
1,4-butanediol dimethacrylate	Non-classified vPvB substance Non-classified PBT substance
N,N-bis-(2-hydroxypropyl)-p- toluidine	Non-classified vPvB substance Non-classified PBT substance
(2-hydroxy-4- methoxyphenyl)phenyl- methanone	Non-classified vPvB substance Non-classified PBT substance
n-butyl acrylate	Non-classified vPvB substance Non-classified PBT substance

12.6 Endocrine disrupting properties:

Product:	The substance/mixture does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher.
Components:	
methyl methacrylate	The substance/mixture does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher.
2-ethylhexyl acrylate	The substance/mixture does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher.
1,4-butanediol dimethacrylate	The substance/mixture does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher.
N,N-bis-(2-hydroxypropyl)-p- toluidine	The substance/mixture does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher.
(2-hydroxy-4- methoxyphenyl)phenyl- methanone	The substance/mixture does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher.
n-butyl acrylate	The substance/mixture does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher.

12.7 Other adverse effects:

Other hazards

Product: Prevent substance from entering soil, natural bodies of water and sewer systems.

SECTION 13: Disposal considerations

13.1 Waste treatment methods

General information: This material and/or its container must be disposed of as hazardous waste.

Disposal methods: Waste is hazardous. It must be disposed of in accordance with the regulations after consultation of the competent local authorities and the disposal company in a suitable and licensed facility.

Contaminated Packaging: Contaminated packaging should ideally be emptied; it can then be recycled after having been decontaminated. Packaging that cannot be cleaned should be disposed of professionally. Uncontaminated packaging may be taken for recycling.

SECTION 14: Transport information

14.1 UN number

ADR : UN 1866

RID : UN 1866

IMDG : UN 1866

IATA : UN 1866

14.2 UN proper shipping name

ADR : RESIN SOLUTION, STABILIZED

RID : RESIN SOLUTION, STABILIZED

IMDG : RESIN SOLUTION, STABILIZED

IATA : Resin solution, STABILIZED

14.3 Transport hazard class(es)

ADR : 3

RID : 3

IMDG : 3

IATA : 3

14.4 Packing group

ADR

Packing group : II

Classification Code : F1

Hazard Identification
Number : 33

Labels : 3

Tunnel restriction code : (D/E)

Remarks : Special provision 640D, observe §35 GGVSEB

RID

Packing group : II

Classification Code : F1

Hazard Identification
Number : 33

Labels : 3

Remarks : Special provision 640D

IMDG

Packing group : II

Labels : 3

EmS Code : F-E, S-E

IATA (Cargo aircraft only)

Packing instruction (cargo
aircraft) : 364

Packing instruction (LQ) : Y341

Packing group : II

Labels : 3

IATA (Passenger and cargo aircraft)

Packing instruction (passenger aircraft) : 353
Packing instruction (LQ) : Y341
Packing group : II
Labels : 3

14.5 Environmental hazards**ADR**

Environmentally hazardous : no

RID

Environmentally hazardous : no

IMDG

Marine pollutant : no

14.6 Special precautions for user

The transport classification(s) provided herein are for informational purposes only, and solely based upon the properties of the unpackaged material as it is described within this Safety Data Sheet. Transportation classifications may vary by mode of transportation, package sizes, and variations in regional or country regulations.

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

Not applicable for product as supplied.

SECTION 15: Regulatory information**15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture:****EU Regulations**

EU. Directive 2010/75/EU on Industrial Emissions (IPPC), Annex II, L 334/17: None present or none present in regulated quantities.

Regulation (EU) No. 649/2012 concerning the export and import of dangerous chemicals, Annex I, Part 1 as amended: None present or none present in regulated quantities.

Regulation (EU) No. 649/2012 concerning the export and import of dangerous chemicals, Annex I, Part 2 as amended: None present or none present in regulated quantities.

Regulation (EU) No. 649/2012 concerning the export and import of dangerous chemicals, Annex I, Part 3 as amended: None present or none present in regulated quantities.

Regulation (EU) No. 649/2012 concerning the export and import of dangerous chemicals, Annex V as

amended: None present or none present in regulated quantities.

EU. REACH Candidate List of Substances of Very High Concern for Authorization (SVHC): None present or none present in regulated quantities.

Regulation (EC) No. 1907/2006 Annex XVII Substances subject to restriction on marketing and use:

Chemical name	CAS-No.	Number on list
1,4-butanediol dimethacrylate	2082-81-7	75, 75
methyl methacrylate	80-62-6	40, 75
2-ethylhexyl acrylate	103-11-7	75, 75, 75
n-butyl acrylate	141-32-2	75
Naphtha (petroleum), heavy alkylate	64741-65-7	28, 29

Directive 2004/37/EC on the protection of workers from the risks related to exposure to carcinogens and mutagens at work.:

Chemical name	CAS-No.	Concentration
Naphtha (petroleum), heavy alkylate	64741-65-7	0,1 - 1,0%

Directive 92/85/EEC: on the safety and health of pregnant workers and workers who have recently given birth or are breast feeding.:

Chemical name	CAS-No.	Concentration
Naphtha (petroleum), heavy alkylate	64741-65-7	0,1 - 1%

EU. Directive 2012/18/EU (SEVESO III) on major accident hazards involving dangerous substances, Annex I:

Classification	Lower-tier Requirements	Upper-tier Requirements
P5c. Flammable liquids	5.000 t	50.000 t
ATTENTION: Classification into hazard category P5c is a minimum classification. Only the operator may estimate if the product is covered by hazard category P5a or P5c. For P5a and P5b different qualifying quantities are valid.		

Directive 98/24/EC on the protection of workers from the risks related to chemical agents at work:

Chemical name	CAS-No.	Concentration
methyl methacrylate	80-62-6	60 - 70%
2-ethylhexyl acrylate	103-11-7	10 - 20%
1,4-butanediol dimethacrylate	2082-81-7	1,0 - 10%
n-butyl acrylate	141-32-2	0,1 - 1,0%
Naphtha (petroleum), heavy alkylate	64741-65-7	0,1 - 1,0%

15.2 Chemical safety assessment: No Chemical Safety Assessment has been carried out.

International regulations

Montreal protocol
 Not applicable

Stockholm convention

Not applicable

Rotterdam convention

Not applicable

Not applicable

Kyoto protocol

Not applicable

SECTION 16: Other information

Abbreviations and acronyms:

ECTLV:	EU. Indicative Occupational Exposure Limit Values in Directives 91/322/EEC, 2000/39/EC, 2006/15/EC, 2009/161/EU, 2017/164/EU, as amended
IR_OEL:	Ireland. OELVs, Schedule 1 (Code of Practice for Chemical Agents Regulations), as amended
ECTLV / STEL:	Short Term Exposure Limit (STEL):
ECTLV / TWA:	Time Weighted Average (TWA):
IR_OEL / STEL:	Short Term Exposure Limit (STEL):
IR_OEL / TWA:	Time Weighted Average (TWA):

ADN - European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways; ADR - Agreement concerning the International Carriage of Dangerous Goods by Road; AIIC - Australian Inventory of Industrial Chemicals; ASTM - American Society for the Testing of Materials; bw - Body weight; CLP - Classification Labelling Packaging Regulation; Regulation (EC) No 1272/2008; CMR - Carcinogen, Mutagen or Reproductive Toxicant; DIN - Standard of the German Institute for Standardisation; DSL - Domestic Substances List (Canada); ECHA - European Chemicals Agency; EC-Number - European Community number; ECx - Concentration associated with x% response; EIGA - European Industrial Gases Association; ELx - Loading rate associated with x% response; EmS - Emergency Schedule; ENCS - Existing and New Chemical Substances (Japan); ErCx - Concentration associated with x% growth rate response; GHS - Globally Harmonized System; GLP - Good Laboratory Practice; IARC - International Agency for Research on Cancer; IATA - International Air Transport Association; IBC - International Code for the Construction and Equipment of Ships carrying Dangerous Chemicals in Bulk; IC50 - Half maximal inhibitory concentration; ICAO - International Civil Aviation Organization; IECSC - Inventory of Existing Chemical Substances in China; IMDG - International Maritime Dangerous Goods; IMO - International Maritime Organization; ISHL - Industrial Safety and Health Law (Japan); ISO - International Organisation for Standardization; KECI - Korea Existing Chemicals Inventory; LC50 - Lethal Concentration to 50 % of a test population; LD50 - Lethal Dose to 50% of a test population (Median Lethal Dose); MARPOL - International Convention for the Prevention of Pollution from Ships; n.o.s. - Not Otherwise Specified; NO(A)EC - No Observed (Adverse) Effect Concentration; NO(A)EL - No Observed (Adverse) Effect Level; NOELR - No Observable Effect Loading Rate; NZIoC - New Zealand Inventory of Chemicals; OECD - Organization for Economic Co-operation and Development; OPPTS - Office of Chemical Safety and Pollution Prevention; PBT - Persistent, Bioaccumulative and Toxic substance; PICCS - Philippines Inventory of Chemicals and Chemical Substances; (Q)SAR - (Quantitative) Structure Activity Relationship; REACH - Regulation (EC) No 1907/2006 of the European Parliament and of the Council concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals; RID - Regulations concerning the International Carriage of Dangerous Goods by Rail; SADT - Self-Accelerating Decomposition Temperature; SDS - Safety Data Sheet; SVHC - substance of very high concern; TCSI - Taiwan Chemical Substance Inventory; TECI - Thailand Existing Chemicals Inventory; TRGS - Technical Rule for Hazardous Substances; TSCA - Toxic Substances Control Act (United States); UN - United Nations; vPvB - Very Persistent and Very Bioaccumulative

Notes:

Note D	Certain substances which are susceptible to spontaneous polymerisation or decomposition are generally placed on the market in a stabilised form. It is in this form that they are listed in Part 3. However, such substances are sometimes placed on the market in a non-stabilised form. In this case, the supplier must state on the label the name of the substance followed by the words 'non-stabilised'.
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Key literature references and sources for data: No data available.

Classification and procedure used to derive the classification for mixtures according to Regulation (EC) 1272/2008 [CLP]

Classification according to Regulation (EC) No 1272/2008 as amended.	Classification procedure
Flammable liquids, Category 2	On basis of test data
Skin irritation, Category 2	Calculation method
Skin sensitizer, Category 1	On basis of test data
Specific Target Organ Toxicity - Single Exposure, Category 3	Calculation method

Wording of the statements in section 2 and 3

H225	Highly flammable liquid and vapor.
H226	Flammable liquid and vapor.
H300	Fatal if swallowed.
H315	Causes skin irritation.
H317	May cause an allergic skin reaction.
H319	Causes serious eye irritation.
H332	Harmful if inhaled.
H335	May cause respiratory irritation.
H400	Very toxic to aquatic life.
H411	Toxic to aquatic life with long lasting effects.
H412	Harmful to aquatic life with long lasting effects.
H225	Highly flammable liquid and vapor.
H226	Flammable liquid and vapor.
H300	Fatal if swallowed.
H315	Causes skin irritation.
H317	May cause an allergic skin reaction.
H319	Causes serious eye irritation.
H332	Harmful if inhaled.
H335	May cause respiratory irritation.
H400	Very toxic to aquatic life.
H411	Toxic to aquatic life with long lasting effects.
H412	Harmful to aquatic life with long lasting effects.

Training information: No data available.

Other information: The product is normally supplied in a stabilized form. If the permissible storage period and/or storage temperature is exceeded, the product may polymerize with heat evolution.

Disclaimer:

This information and all further technical advice is based on our present knowledge and experience. However, it implies no liability or other legal responsibility on our part, including with regard to existing third party intellectual property rights, especially patent rights. In particular, no warranty, whether express or implied, or guarantee of product properties in the legal sense is intended or implied. We reserve the right to make any changes according to technological progress or further developments. The customer is not released from the obligation to conduct careful inspection and testing of incoming goods. Performance of the product described herein should be verified by testing, which should be carried out only by qualified experts in the sole responsibility of a customer. Reference to trade names used by other companies is neither a recommendation, nor does it imply that similar products could not be used.