

SAFETY DATA SHEET

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

1.1. Product identifier

Trade name or designation of the mixture HumiSeal UV50LV

Registration number -

Synonyms None.

Product code FM0000-867

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

Identified uses Protective Coating for Printed Circuit Board

Uses advised against No other uses are advised.

1.3. Details of the supplier of the safety data sheet

Manufacturer/Supplier HUMISEAL EUROPE LIMITED

Address
HumiSeal
505 Eskdale Road
Winnersh
Wokingham, Berkshire
RG41 5TU
UK

Telephone General Assistance: +44 (0) 118 944 2333

E-mail europetechsupport@chasecorp.com

Emergency telephone number Chemtrec UK: +44 (0) 870 820 0418

EU Address HUMISEAL EUROPE SARL

Address
HumiSeal Europe SARL
4-6 Avenue Eiffel
CARRIERES SUR SEINE
Île-de-France
78420
France

Telephone +33 130098686

E-mail europetechsupport@chasecorp.com

Emergency telephone number Chemtrec UK: +44 (0) 870 820 0418

1.4. Emergency telephone number

General in EU 112 (Available 24 hours a day. SDS/Product information may not be available for the Emergency Service.)

1.4. Emergency telephone number

Tox Info Suisse

145 (Available 24 hours a day. SDS/Product information may not be available for the Emergency Service.)

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

The mixture has been assessed and/or tested for its physical, health and environmental hazards and the following classification applies. The classification of the substance or mixture has been performed in accordance with ABNT NBR 14725.

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

Health hazards

Skin corrosion/irritation	Category 2	H315 - Causes skin irritation.
Serious eye damage/eye irritation	Category 2	H319 - Causes serious eye irritation.
Skin sensitisation	Category 1	H317 - May cause an allergic skin reaction.
Reproductive toxicity	Category 1B	H360 - May damage fertility or the unborn child.
Specific target organ toxicity - single exposure	Category 3 respiratory tract irritation	H335 - May cause respiratory irritation.

Environmental hazards

Hazardous to the aquatic environment, acute aquatic hazard	Category 1	H400 - Very toxic to aquatic life.
Hazardous to the aquatic environment, long-term aquatic hazard	Category 1	H410 - Very toxic to aquatic life with long lasting effects.

2.2. Label elements

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

Contains:

Hexamethylene diisocyanate, oligomers, Isobornyl acrylate, (5-Ethyl-1,3-dioxan-5-yl)methyl acrylate, phenyl bis(2,4,6-trimethylbenzoyl)-phosphine oxide, 2-Ethylhexanoic acid, Trimethylolpropane triacrylate

Hazard pictograms



Signal word

Danger

Hazard statements

H315	Causes skin irritation.
H317	May cause an allergic skin reaction.
H319	Causes serious eye irritation.
H335	May cause respiratory irritation.
H360	May damage fertility or the unborn child.
H400	Very toxic to aquatic life.
H410	Very toxic to aquatic life with long lasting effects.

Precautionary statements

Prevention

P201	Obtain special instructions before use.
P202	Do not handle until all safety precautions have been read and understood.
P261	Avoid breathing mist/vapours.
P264	Wash 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.

Response

P302 + P352	IF ON SKIN: Wash with plenty of water.
P304 + P340	IF INHALED: Remove person to fresh air and keep comfortable for breathing.
P305 + P351 + P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P308 + P313	IF exposed or concerned: Get medical advice/attention.

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.
P391 Collect spillage.

Storage

P403 + P233 Store in a well-ventilated place. Keep container tightly closed.
P405 Store locked up.

Disposal

P501 Dispose of contents/container in accordance with local/regional/national/international regulations.

Supplemental label information 4,8 % of the mixture consists of component(s) of unknown acute oral toxicity. 4,8 % of the mixture consists of component(s) of unknown acute dermal toxicity. 36,78 % of the mixture consists of component(s) of unknown acute inhalation toxicity. 4,8 % of the mixture consists of component(s) of unknown acute hazards to the aquatic environment. 4,8 % of the mixture consists of component(s) of unknown long-term hazards to the aquatic environment. EUH204 - Contains isocyanates. May produce an allergic reaction.

2.3. Other hazards This mixture does not contain substances assessed to be vPvB / PBT according to Regulation (EC) No 1907/2006, Annex XIII. The product does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher. The mixture does not contain any substances included in the list established in accordance with REACH Article 59(1) for having endocrine disrupting properties at a concentration equal to or greater than 0.1% by weight.

SECTION 3: Composition/information on ingredients

3.2. Mixtures

General information

Chemical name	%	CAS-No. / EC No.	REACH Registration No.	Index No.	Notes
Isooctyl acrylate	30 - < 40	29590-42-9 249-707-8	01-2119486988-09	607-244-00-2	Classification: Skin Irrit. 2;H315, Eye Irrit. 2;H319, Aquatic Acute 1;H400, Aquatic Chronic 1;H410
Hexamethylene diisocyanate, oligomers	20 - < 30	28182-81-2 500-060-2	01-2119488934-20	-	Classification: Acute Tox. 4;H332;(ATE: 1,5 mg/l), Skin Sens. 1;H317, STOT SE 3;H335
Isobornyl acrylate	10 - < 20	5888-33-5 227-561-6	01-2119957862-25	607-756-00-6	Classification: Skin Irrit. 2;H315, Eye Irrit. 2;H319, Skin Sens. 1;H317, STOT SE 3;H335, Aquatic Acute 1;H400, Aquatic Chronic 1;H410
(5-Ethyl-1,3-dioxan-5-yl)methyl acrylate	3 - < 5	66492-51-1 266-380-7	01-2119976303-36	-	Classification: Skin Irrit. 2;H315, Skin Sens. 1B;H317, Aquatic Chronic 2;H411
phenyl bis(2,4,6-trimethylbenzoyl)-phosphine oxide	3 - < 5	162881-26-7 423-340-5	01-2119489401-38	015-189-00-5	Classification: Skin Sens. 1;H317, Aquatic Chronic 4;H413
2-Ethylhexanoic acid	< 1	149-57-5 205-743-6	-	607-230-00-6	Classification: Acute Tox. 4;H302;(ATE: 1600 mg/kg bw), Acute Tox. 4;H312;(ATE: 1260 mg/kg bw), Repr. 1B;H360
4-isocyanatosulphonyltoluene; tosyl isocyanate	< 1	4083-64-1 223-810-8	01-211990050-47-XXXX	615-012-00-7	Classification: Skin Irrit. 2;H315, Eye Irrit. 2;H319, Resp. Sens. 1;H334, STOT SE 3;H335 Supplemental Hazard EUH014 Statement(s): Specific Concentration Limits: Skin Irrit. 2;H315: C ≥ 5 %, Eye Irrit. 2;H319: C ≥ 5 %, STOT SE 3;H335: C ≥ 5 %

Chemical name	%	CAS-No. / EC No.	REACH Registration No.	Index No.	Notes
Trimethylolpropane triacrylate	< 0,3	15625-89-5 239-701-3	01-2119489896-11	607-111-00-9	
Classification: Skin Irrit. 2;H315, Eye Irrit. 2;H319, Skin Sens. 1;H317, Carc. 2;H351, STOT SE 3;H335, Aquatic Acute 1;H400(M=1), Aquatic Chronic 1;H410(M=1)					
Specific Concentration Limits: STOT SE 3;H335: C ≥ 10 %					

List of abbreviations and symbols that may be used above

ATE: Acute toxicity estimate.

M: M-factor

vPvB: very persistent and very bioaccumulative substance.

PBT: persistent, bioaccumulative and toxic substance.

#: This substance has been assigned Union workplace exposure limit(s).

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

Composition comments The full text for all H-statements is displayed in section 16.

SECTION 4: First aid measures

General information IF exposed or concerned: Get medical advice/attention. If you feel unwell, seek medical advice (show the label where possible). Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves. Show this safety data sheet to the doctor in attendance. Wash contaminated clothing before reuse.

4.1. Description of first aid measures

Inhalation Remove victim to fresh air and keep at rest in a position comfortable for breathing. Call a poison centre or doctor/physician if you feel unwell.

Skin contact Remove contaminated clothing immediately and wash skin with soap and water. In case of eczema or other skin disorders: Seek medical attention and take along these instructions. Wash contaminated clothing before reuse.

Eye contact Immediately flush eyes with plenty of water for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Get medical attention if irritation develops and persists.

Ingestion Rinse mouth. Get medical attention if symptoms occur.

4.2. Most important symptoms and effects, both acute and delayed Severe eye irritation. Symptoms may include stinging, tearing, redness, swelling, and blurred vision. May cause respiratory irritation. Skin irritation. May cause redness and pain. May cause an allergic skin reaction. Dermatitis. Rash.

4.3. Indication of any immediate medical attention and special treatment needed Provide general supportive measures and treat symptomatically. Keep victim under observation. Symptoms may be delayed.

SECTION 5: Firefighting measures

General fire hazards No unusual fire or explosion hazards noted.

5.1. Extinguishing media

Suitable extinguishing media Water fog. Foam. Dry chemical powder. Carbon dioxide (CO₂).

Unsuitable extinguishing media Water. Do not use water jet as an extinguisher, as this will spread the fire.

5.2. Special hazards arising from the substance or mixture During fire, gases hazardous to health may be formed.

5.3. Advice for firefighters

Special protective equipment for firefighters Self-contained breathing apparatus and full protective clothing must be worn in case of fire.

Special fire fighting procedures Move containers from fire area if you can do so without risk.

Specific methods Use standard firefighting procedures and consider the hazards of other involved materials.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

For non-emergency personnel Avoid breathing mist/vapours. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Do not touch or walk through spilled material.

For emergency responders Keep unnecessary personnel away. Ensure adequate ventilation. Avoid breathing mist/vapours. Local authorities should be advised if significant spillages cannot be contained. Use personal protection recommended in Section 8 of the SDS.

6.2. Environmental precautions	Avoid release to the environment. Inform appropriate managerial or supervisory personnel of all environmental releases. Prevent further leakage or spillage if safe to do so. Avoid discharge into drains, water courses or onto the ground.
6.3. Methods and material for containment and cleaning up	Prevent entry into waterways, sewer, basements or confined areas. Large Spills: Stop the flow of material, if this is without risk. Dike the spilled material, where this is possible. Absorb in vermiculite, dry sand or earth and place into containers. Following product recovery, flush area with water. Small Spills: Wipe up with absorbent material (e.g. cloth, fleece). Clean surface thoroughly to remove residual contamination. Never return spills to original containers for re-use.
6.4. Reference to other sections	For personal protection, see section 8 of the SDS. For waste disposal, see section 13 of the SDS.

SECTION 7: Handling and storage

7.1. Precautions for safe handling	Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Avoid breathing mist/vapours. Avoid contact with eyes, skin, and clothing. Avoid prolonged exposure. Pregnant or breastfeeding women must not handle this product. Should be handled in closed systems, if possible. Provide adequate ventilation. Wear appropriate personal protective equipment. Avoid release to the environment. Observe good industrial hygiene practices.
7.2. Conditions for safe storage, including any incompatibilities	Store locked up. Store in tightly closed container. Store away from incompatible materials (see Section 10 of the SDS). Directive 2012/18/EU on major accident hazards involving dangerous substances, as amended ANNEX 1, PART 1 Categories of dangerous substances Hazard categories in accordance with Regulation (EC) No 1272/2008 - E1 Hazardous to the Aquatic Environment Acute (Lower-tier requirements = 100 tonnes; Upper-tier requirements = 200 tonnes) - E1 Hazardous to the Aquatic Environment Chronic (Lower-tier requirements = 100 tonnes; Upper-tier requirements = 200 tonnes)
7.3. Specific end use(s)	Observe industrial sector guidance on best practices.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Occupational exposure limits

Switzerland. SUVA Grenzwerte am Arbeitsplatz: Aktuelle MAK-Werte

Components	Type	Value
4-isocyanatosulphonyltoluene; tosyl isocyanate (CAS 4083-64-1)	STEL	0,02 mg/m3
	TWA	0,02 mg/m3
Hexamethylene diisocyanate, oligomers (CAS 28182-81-2)	STEL	0,02 mg/m3
	TWA	0,02 mg/m3

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

Recommended monitoring procedures Follow standard monitoring procedures.

Derived no effect levels (DNELs) Not available.

Predicted no effect concentrations (PNECs) Not available.

8.2. Exposure controls

Appropriate engineering controls	Good general ventilation should be used. Ventilation rates should be matched to conditions. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits. If exposure limits have not been established, maintain airborne levels to an acceptable level. Provide eyewash station and safety shower.
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Individual protection measures, such as personal protective equipment

General information	Use personal protective equipment as required. Personal protection equipment should be chosen according to the CEN standards and in discussion with the supplier of the personal protective equipment.
Eye/face protection	Chemical respirator with organic vapour cartridge and full facepiece.
Skin protection	
- Hand protection	Wear appropriate chemical resistant gloves. Avoid direct skin contact with product. Identify potential areas for indirect skin contact. Wear gloves (tested to EN374) if hand contact with substance likely. Clean up contamination/spills as soon as they occur. Wash off any skin contamination immediately. Provide basic employee training to prevent / minimise exposures and to report any skin problems that may develop.
- Other	Wear appropriate chemical resistant clothing. Use of an impervious apron is recommended.
Respiratory protection	Chemical respirator with organic vapour cartridge and full facepiece.
Thermal hazards	Not applicable.
Hygiene measures	Observe any medical surveillance requirements. Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment to remove contaminants. Contaminated work clothing should not be allowed out of the workplace.
Environmental exposure controls	Inform appropriate managerial or supervisory personnel of all environmental releases. Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. Fume scrubbers, filters or engineering modifications to the process equipment may be necessary to reduce emissions to acceptable levels.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state	Liquid.
Form	Liquid.
Colour	Light yellow.
Odour	Mild.
Melting point/freezing point	Not available.
Boiling point or initial boiling point and boiling range	196,8 °C (386,24 °F) estimated
Flammability	Not applicable.
Upper/lower flammability or explosive limits	
Explosive limit - lower (%)	Not available.
Explosive limit – upper (%)	Not available.
Flash point	90,6 °C (195,1 °F) estimated
Auto-ignition temperature	Not available.
Decomposition temperature	Not available.
pH	Does not apply.
Kinematic viscosity	Not available.
Solubility	
Solubility (water)	Negligible
Partition coefficient (n-octanol/water) (log value)	Not available.
Vapour pressure	0,1 hPa estimated
Density and/or relative density	
Density	> 1,00 - < 1,10 g/cm3 0,99 g/cm3 estimated
Vapour density	Not available.
Particle characteristics	Not available.

9.2. Other information

9.2.1. Information with regard to physical hazard classes	No relevant additional information available.
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9.2.2. Other safety characteristics

Brookfield viscosity	> 80 - < 120 cP
Miscible (water)	Negligible
Percent volatile	<5 % v/v 0,02 % estimated
Specific gravity	> 1 - < 1,1 0,99 estimated
Viscosity	> 80 - < 120 cP
Viscosity temperature	25 °C (77 °F)
VOC	0,02 % estimated 0,02 % Switzerland estimated

SECTION 10: Stability and reactivity

10.1. Reactivity	The product is stable and non-reactive under normal conditions of use, storage and transport.
10.2. Chemical stability	Material is stable under normal conditions.
10.3. Possibility of hazardous reactions	No dangerous reaction known under conditions of normal use.
10.4. Conditions to avoid	Avoid temperatures exceeding the flash point. Contact with incompatible materials.
10.5. Incompatible materials	Strong oxidising agents.
10.6. Hazardous decomposition products	No hazardous decomposition products are known.

SECTION 11: Toxicological information

General information	Occupational exposure to the substance or mixture may cause adverse effects.
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Information on likely routes of exposure

Inhalation	May cause irritation to the respiratory system. Prolonged inhalation may be harmful.
Skin contact	Causes skin irritation. May cause an allergic skin reaction.
Eye contact	Causes serious eye irritation.
Ingestion	May cause discomfort if swallowed. However, ingestion is not likely to be a primary route of occupational exposure.

Symptoms	Severe eye irritation. Symptoms may include stinging, tearing, redness, swelling, and blurred vision. May cause respiratory irritation. Skin irritation. May cause redness and pain. May cause an allergic skin reaction. Dermatitis. Rash.
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11.1. Information on hazard classes as defined in Regulation (EC) No 1272/2008

Acute toxicity	Not known.
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Product	Species	Test Results
HumiSeal UV50LV		
Acute		
Dermal		
LD50	Rabbit	252789 mg/kg
Inhalation		
LC50	Rat	938 mg/l, 6 Hours
Oral		
LD50	Rat	401 g/kg
Components	Species	Test Results
(5-Ethyl-1,3-dioxan-5-yl)methyl acrylate (CAS 66492-51-1)		
Acute		
Dermal		
LD50	Rat	> 2000 mg/kg
Oral		
LD50	Rat	> 2000 mg/kg

Components	Species	Test Results
2-Ethylhexanoic acid (CAS 149-57-5)		
<u>Acute</u>		
Dermal		
LD50	Rabbit	1260 mg/kg
Oral		
LD50	Rat	1,6 - 3 g/kg
4-isocyanatosulphonyltoluene; tosyl isocyanate (CAS 4083-64-1)		
<u>Acute</u>		
Dermal		
LD50	Rat	> 2000 mg/kg, 24 Hours
Oral		
LD50	Rat	2330 mg/kg
Hexamethylene diisocyanate, oligomers (CAS 28182-81-2)		
<u>Acute</u>		
Dermal		
LD50	Rat	> 2000 mg/kg
		> 2000 mg/kg, 24 Hours
Inhalation		
<i>Mist</i>		
LC50	Rat	0,39 mg/l, 4 hours
Oral		
LD50	Rat	> 2000 mg/kg
Isobornyl acrylate (CAS 5888-33-5)		
<u>Acute</u>		
Dermal		
LD50	Rabbit	> 3000 mg/kg
Oral		
LD50	Rat	4350 mg/kg
Isooctyl acrylate (CAS 29590-42-9)		
<u>Acute</u>		
Dermal		
LD50	Rabbit	> 2000 mg/kg
Oral		
LD50	Rat	> 5000 mg/kg
phenyl bis(2,4,6-trimethylbenzoyl)-phosphine oxide (CAS 162881-26-7)		
<u>Acute</u>		
Dermal		
LD50	Rat	> 2000 mg/kg
		> 2000 mg/kg, 24 Hours
Oral		
LD50	Rat	> 2000 mg/kg
Trimethylolpropane triacrylate (CAS 15625-89-5)		
<u>Acute</u>		
Inhalation		
<i>Vapour</i>		
LC50	Rat	> 0,55 mg/l, 6 hours
Oral		
LD50	Rat	3680 mg/kg
Skin corrosion/irritation	Causes skin irritation.	
Serious eye damage/eye irritation	Causes serious eye irritation.	

Respiratory sensitisation	Due to partial or complete lack of data the classification is not possible.
Skin sensitisation	May cause an allergic skin reaction.
Germ cell mutagenicity	Due to partial or complete lack of data the classification is not possible.
Carcinogenicity	Risk of cancer cannot be excluded with prolonged exposure.

IARC Monographs. Overall Evaluation of Carcinogenicity

Trimethylolpropane triacrylate (CAS 15625-89-5) 2B Possibly carcinogenic to humans.

Reproductive toxicity	May damage fertility or the unborn child.
Specific target organ toxicity - single exposure	May cause respiratory irritation.
Specific target organ toxicity - repeated exposure	Due to partial or complete lack of data the classification is not possible.
Aspiration hazard	Due to partial or complete lack of data the classification is not possible.
Mixture versus substance information	No information available.

11.2. Information on other hazards

Endocrine disrupting properties The product does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher. This mixture does not contain any substances having endocrine disrupting properties with respect to human health as assessed in accordance with the criteria set out in Regulations (EC) No 1907/2006, (EU) No 2017/2100 and (EU) 2018/605, at a concentration equal to or greater than 0.1% by weight.

Other information Not available.

SECTION 12: Ecological information

12.1. Toxicity Very toxic to aquatic life with long lasting effects.

Product	Species		Test Results
HumiSeal UV50LV			
Aquatic			
<i>Acute</i>			
Algae	EC50	Algae	715,7895 mg/l, 72 hours estimated
Crustacea	EC50	Daphnia	1,2436 mg/l, 48 hours estimated
Fish	LC50	Fish	1,4477 mg/l, 96 hours estimated
Components	Species		Test Results
(5-Ethyl-1,3-dioxan-5-yl)methyl acrylate (CAS 66492-51-1)			
Aquatic			
<i>Acute</i>			
Crustacea	EC50	Daphnia	20 mg/l, 48 hours
Fish	LC50	Fish	4 mg/l, 96 hours
Isobornyl acrylate (CAS 5888-33-5)			
Aquatic			
<i>Acute</i>			
Fish	LC50	Fish	0,704 mg/l, 96 hours
Isooctyl acrylate (CAS 29590-42-9)			
Aquatic			
<i>Acute</i>			
Crustacea	EC50	Daphnia	0,4 mg/l, 48 hours
Fish	LC50	Fish	0,67 mg/l, 96 hours
Trimethylolpropane triacrylate (CAS 15625-89-5)			
Aquatic			
<i>Acute</i>			
Crustacea	EC50	Daphnia	19,9 mg/l, 48 hours
Fish	LC50	Fish	0,87 mg/l, 96 hours

12.2. Persistence and degradability	Not available.
12.3. Bioaccumulative potential	Not available.
Partition coefficient n-octanol/water (log Kow)	
2-Ethylhexanoic acid (CAS 149-57-5)	2,64
Bioconcentration factor (BCF)	Not available.
12.4. Mobility in soil	No data available.
12.5. Results of PBT and vPvB assessment	This mixture does not contain substances assessed to be vPvB / PBT according to Regulation (EC) No 1907/2006, Annex XIII.
12.6. Endocrine disrupting properties	The product does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher. This mixture does not contain any substances having endocrine disrupting properties with respect to the environment as assessed in accordance with the criteria set out in Regulations (EC) No 1907/2006, (EU) No 2017/2100 and (EU) 2018/605, at a concentration equal to or greater than 0.1% by weight.
12.7. Other adverse effects	No other adverse environmental effects (e.g. ozone depletion, photochemical ozone creation potential, endocrine disruption, global warming potential) are expected from this component.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Residual waste	Dispose of in accordance with local regulations. Empty containers or liners may retain some product residues. This material and its container must be disposed of in a safe manner.
Contaminated packaging	Since emptied containers may retain product residue, follow label warnings even after container is emptied. Empty containers should be taken to an approved waste handling site for recycling or disposal.
EU waste code	The Waste code should be assigned in discussion between the user, the producer and the waste disposal company.
Disposal methods/information	Collect and reclaim or dispose in sealed containers at licensed waste disposal site. Do not allow this material to drain into sewers/water supplies. Do not contaminate ponds, waterways or ditches with chemical or used container. Dispose of contents/container in accordance with local/regional/national/international regulations.
Special precautions	Dispose in accordance with all applicable regulations.

SECTION 14: Transport information

ADR

14.1. UN number	UN3082
14.2. UN proper shipping name	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.
14.3. Transport hazard class(es)	
Class	9
Subsidiary hazard	-
Label(s)	9
Hazard No. (ADR)	90
Tunnel restriction code	-
14.4. Packing group	III
14.5. Environmental hazards	No.
14.6. Special precautions for user	Read safety instructions, SDS and emergency procedures before handling.

RID

14.1. UN number	UN3082
14.2. UN proper shipping name	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.
14.3. Transport hazard class(es)	
Class	9
Subsidiary hazard	-
Label(s)	9
14.4. Packing group	III
14.5. Environmental hazards	No.
14.6. Special precautions for user	Read safety instructions, SDS and emergency procedures before handling.

ADN

- 14.1. UN number UN3082
- 14.2. UN proper shipping name ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.
- 14.3. Transport hazard class(es)
- Class 9
- Subsidiary hazard -
- Label(s) 9
- 14.4. Packing group III
- 14.5. Environmental hazards No.
- 14.6. Special precautions for user Read safety instructions, SDS and emergency procedures before handling.

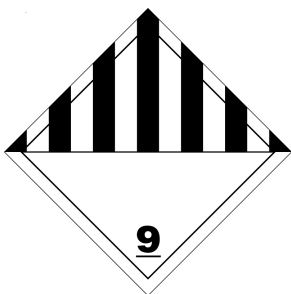
IATA

- 14.1. UN number UN3082
- 14.2. UN proper shipping name Environmentally hazardous substance, liquid, n.o.s. (Isooctyl acrylate)
- 14.3. Transport hazard class(es)
- Class 9
- Subsidiary hazard -
- 14.4. Packing group III
- 14.5. Environmental hazards No.
- ERG Code 9L
- 14.6. Special precautions for user Read safety instructions, SDS and emergency procedures before handling.
- Other information
- Passenger and cargo aircraft Allowed with restrictions.
- Cargo aircraft only Allowed with restrictions.

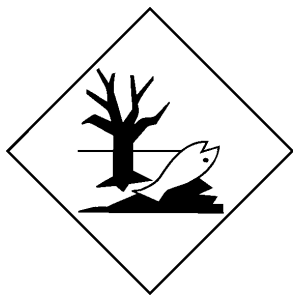
IMDG

- 14.1. UN number UN3082
- 14.2. UN proper shipping name ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Isooctyl acrylate), MARINE POLLUTANT
- 14.3. Transport hazard class(es)
- Class 9
- Subsidiary hazard -
- 14.4. Packing group III
- 14.5. Environmental hazards
- Marine pollutant Yes
- EmS F-A, S-F
- 14.6. Special precautions for user Read safety instructions, SDS and emergency procedures before handling.
- 14.7. Maritime transport in bulk according to IMO instruments Not established.

ADN; ADR; IATA; IMDG; RID



Marine pollutant



General information

IMDG Regulated Marine Pollutant.

SECTION 15: Regulatory information

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

EU regulations

Regulation (EC) No. 1005/2009 on substances that deplete the ozone layer, Annex I and II, as amended

Not listed.

Regulation (EU) 2019/1021 On persistent organic pollutants (recast), as amended

Not listed.

Regulation (EU) No. 649/2012 concerning the export and import of dangerous chemicals, Annex I, Part 1 as amended

Not listed.

Regulation (EU) No. 649/2012 concerning the export and import of dangerous chemicals, Annex I, Part 2 as amended

Not listed.

Regulation (EU) No. 649/2012 concerning the export and import of dangerous chemicals, Annex I, Part 3 as amended

Not listed.

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

Not listed.

Regulation (EC) No. 166/2006 Annex II Pollutant Release and Transfer Registry, as amended

Not listed.

Regulation (EC) No. 1907/2006, REACH Article 59(10) Candidate List as currently published by ECHA

Not listed.

Authorisations

Regulation (EC) No. 1907/2006, REACH Annex XIV Substances subject to authorization, as amended

Not listed.

Restrictions on use

Regulation (EC) No. 1907/2006, REACH Annex XVII Substances subject to restriction on marketing and use, as amended - Conditions of restriction given for the associated entry number should be considered

2-Ethylhexanoic acid (CAS 149-57-5)

Regulation 2019/1148 on Marketing and Use of Explosive Precursors, Annex I, as amended

Not listed.

Regulation 2019/1148 on Marketing and Use of Explosive Precursors, Annex II, as amended

Not listed.

Other EU regulations

Directive 2012/18/EU on major accident hazards involving dangerous substances, as amended

ANNEX 1, PART 1 Categories of dangerous substances

Hazard categories in accordance with Regulation (EC) No 1272/2008

- E1 Hazardous to the Aquatic Environment Acute

- E1 Hazardous to the Aquatic Environment Chronic

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

2-Ethylhexanoic acid (CAS 149-57-5)

Other regulations

The product is classified and labelled in accordance with Regulation (EC) 1272/2008 (CLP Regulation) as amended. This Safety Data Sheet complies with the requirements of Regulation (EC) No 1907/2006, as amended.

National regulations	According to Directive 92/85/EEC as amended, pregnant women should not work with the product, if there is the least risk of exposure. Young people under 18 years old are not allowed to work with this product according to EU Directive 94/33/EC on the protection of young people at work, as amended Use of this product by young persons under the age of 18 is not allowed in accordance with the Management of Health and Safety at Work Regulations 1999 [SI 1999/3242], as amended. Follow national regulation for work with chemical agents in accordance with Directive 98/24/EC, as amended. Switzerland. Schedules 1A-3B on Substances Subject to ChKV, Regulation on the Control of Chemicals with Civilian and Military Use (ChKV) Not listed.
15.2. Chemical safety assessment	No Chemical Safety Assessment has been carried out.
SECTION 16: Other information	
List of abbreviations	ADN: European Agreement Concerning the International Carriage of Dangerous Goods by Inland Waterways. ADR: Agreement concerning the International Carriage of Dangerous Goods by Road. CAS: Chemical Abstract Service. CEN: European Committee for Standardization. IATA: International Air Transport Association. IBC Code: International Code for the Construction and Equipment of Ships Carrying Dangerous Chemicals in Bulk. IMDG: International Maritime Dangerous Goods. MARPOL: International Convention for the Prevention of Pollution from Ships. PBT: Persistent, bioaccumulative and toxic. RID: Regulations concerning the International Carriage of Dangerous Goods by Rail. STEL: Short term exposure limit. TWA: Time Weighted Average. vPvB: Very persistent and very bioaccumulative.
References	Not available.
Information on evaluation method leading to the classification of mixture	The classification for health and environmental hazards is derived by a combination of calculation methods and test data, if available.
Full text of any statements, which are not written out in full under sections 2 to 15	H302 Harmful if swallowed. H312 Harmful in contact with skin. H315 Causes skin irritation. H317 May cause an allergic skin reaction. H319 Causes serious eye irritation. H332 Harmful if inhaled. H334 May cause allergy or asthma symptoms or breathing difficulties if inhaled. H335 May cause respiratory irritation. H351 Suspected of causing cancer. H360 May damage fertility or the unborn child. H400 Very toxic to aquatic life. H410 Very toxic to aquatic life with long lasting effects. H411 Toxic to aquatic life with long lasting effects. H413 May cause long lasting harmful effects to aquatic life. EUH014 Reacts violently with water.
Revision information	Product and Company Identification: Product and Company Identification
Training information	Follow training instructions when handling this material.
Disclaimer	The information and recommendations in this safety data sheet are, to the best of our knowledge, accurate as of the date of issue. Nothing herein shall be deemed to create any warranty, expressed or implied. It is the responsibility of the user to determine the applicability of this information and the suitability of the material or product for any particular purpose