

Manufacturer:

Dymax®

Product Name:

Dymax OP-61-LS Low Shrinkage Optical Adhesive, White Opaque, UV Cure - 3ml Syringe

Manufacturer Part Number:

OP-61-LS-3ML

Click here for more details on the Dymax OP-61-LS Low Shrinkage Optical Adhesive, White Opaque, UV Cure - 3ml Syringe



This safety data sheet was created pursuant to the requirements of: Regulation (EC) No. 1272/2008 and Regulation (EC) No. 1907/2006 as amended by Regulation (EU) No. 2020/878

OP-61-LS

Issuing Date 28-Apr-2023 Revision date 28-Apr-2023 Revision Number 32

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

1.1. Product identifier

Product Name OP-61-LS

Pure substance/mixture Mixture

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

Recommended use Adhesives and/or sealants.

Uses advised against Consumer use.

1.3. Details of the supplier of the safety data sheet

 Manufacturer
 Manufacturing sites

 Dymax Corporation
 Dymax Asia Pacific Pte Ltd.

 318 Industrial Lane
 Block 5008 (East Wing)

 Torrington, CT 06790
 Ang Mo Kio Ave. 5

 Tel: 860-482-1010
 #05-3 TECHplace II

 Fax: 860-496-0608
 Singapore 569874

 Tel: +65-6752-2887

 Block 5008 (East Wing)
 Block 5008 (East Wing)

 Ang Mo Kio Ave. 5
 Ang Mo Kio Ave. 5

 #05-3 TECHplace II
 #05-3 TECHplace II

 Singapore 569874
 Singapore 569874

 Tel: +65-6752-2887
 Tel: +65-6752-2887

 Fax: +65-6752-2813
 Fax: +65-6752-2813

Supplier

Dymax Asia Pacific Pte Ltd.

For further information, please contact

1.4. Emergency telephone number

Emergency Telephone Chemtrec @ 001-703-741-5970 (24hrs)

Austria +(43)-13649237	Belgium +(32)-28083237	Bulgaria +(359)-32570104
Croatia +(385)-17776920	Czech Republic +(420)-228880039	Denmark +(45)-69918573
Estonia +(372)-6681294	Finland +(358)-942419014	France +(33)-975181407
Germany 0800-181-7059	Greece +(30)-2111768478	Hungary +(36)-18088425
Ireland +(353)-19014670	Italy 800-789-767	Latvia +(371)-66165504
Lithuania +(370)-52140238	Luxembourg +(352)-20202416	Netherlands +(31)-858880596
Norway +(47)-21930678	Poland +(48)-223988029	Portugal +(351)-308801773
Romania (+40)-37-6300026	Slovakia +(423)-233057972	Slovenia +(386)-18888016
Spain 900-868538	Sweden +(46)-852503403	United Kingdom +(44)-870-8200418
Israel +(972)-37630639	Russia 8-800-100-6346	Saudi Arabia +(966)-8111095861
Switzerland +(41)-435082011	Turkey +(90)-212-7055340	Ukraine +(380)-947101374

SECTION 2: Hazards identification

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2.1. Classification of the substance or mixture

Regulation (EC) No 1272/2008

Skin corrosion/irritation	Category 2 - (H315)
Serious eye damage/eye irritation	Category 2 - (H319)
Skin sensitization	Category 1A - (H317)
Specific target organ toxicity (single exposure)	Category 3 - (H335)
Category 3 - Respiratory irritation	

2.2. Label elements



Signal word - Warning

Contains Acrylic Acid, Phosphine oxide, phenylbis(2,4,6-trimethylbenzoyl)-, Isobornyl Acrylate, 2-Hydroxyethyl methacrylate

H315 - Causes skin irritation H317 - May cause an allergic skin reaction

H319 - Causes serious eye irritation H335 - May cause respiratory irritation

EUH208 - Contains 2-ethyl-2-[[(1-oxoallyl)oxy]methyl]-1,3-propanediyl diacrylate; 2,2-bis(acryloyloxymethyl)butyl acrylate; trimethylolpropane triacrylate, 3-Methacryloxypropyltrimethoxysilane May produce an allergic reaction.

Precautionary Statements - EU (§28, 1272/2008)

P261 - Avoid breathing dust/fume/gas/mist/vapors/spray

P264 - Wash face, hands and any exposed skin thoroughly after handling

P280 - Wear protective gloves/protective clothing/eye protection/face protection.

2.3. Other hazards

No information available.

Product Information

Testing for acute and chronic aquatic effects determined no environmental classification is required. OECD Test No. 202: Daphnia sp., Acute Immobilization Test.

PBT and vPvB assessment

The product does not contain any substance(s) classified as PBT or vPvB above the threshold of declaration.

Endocrine Disruptor Information

This product does not contain any known or suspected endocrine disruptors.

SECTION 3: Composition/information on ingredients

3.1 Substances

Not applicable

3.2 Mixtures

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Contact the professionals at Fiber Optic Center for a quote or to get more details.



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	Chemical name	CAS No	EC No (EU Index No)	REACH registration number	Weight-%	Classification according to
			,			Regulation (EC) No. 1272/2008 [CLP]
	Isobornyl Acrylate	5888-33-5	(607-756-00-6) 227-561-6	01-2119957862-25- 0011	10-24	Skin Irrit. 2 (H315) Eye Irrit. 2 (H319) Skin Sens. 1 (H317) STOT SE 3 (H335) Aquatic Acute 1 (H400) Aquatic Chronic 1 (H410)
	2-Hydroxyethyl methacrylate	868-77-9	(607-124-00-X) 212-782-2	01-2119490169-29- 0022	5-9	Skin Irrit. 2 (H315) Eye Irrit. 2 (H319) Skin Sens. 1 (H317)
	Acrylic Acid	79-10-7	(607-061-00-8) 201-177-9		1-<3	Acute Tox. 4 (H302) Acute Tox. 4 (H312) Acute Tox. 4 (H332) Skin Corr. 1A (H314) Aquatic Acute 1 (H400) Flam. Liq. 3 (H226)
	Benzene, (1-methylethenyl)-, homopolymer, ar-(2-hydroxy-2-met yl-1-oxopropyl) derivs.	163702-01-0	402-990-3	-	<1	Repr. 2 (H361f)
2,2	thyl-2-[[(1-oxoallyl)oxy] lethyl]-1,3-propanediyl diacrylate; l-bis(acryloyloxymethyl) butyl acrylate; trimethylolpropane triacrylate	15625-89-5	(607-111-00-9) 239-701-3	01-2119489896-11- XXXX	<1	Skin Irrit. 2 (H315) Eye Irrit. 2 (H319) Skin Sens. 1 (H317)
3-N	lethacryloxypropyltrimet hoxysilane	2530-85-0	219-785-8		<1	Skin Sens. 1 (H317)
phe	Phosphine oxide, enylbis(2,4,6-trimethylbe nzoyl)-	162881-26-7	(015-189-00-5) 423-340-5	7 =	<1	Skin Sens. 1A (H317) Aquatic Chronic 4 (H413)

Chemical name	CAS No	Specific concentration	M-Factor	M-Factor (long-term)
		limit (SCL)		
Acrylic Acid	79-10-7	STOT SE 3 :: C>=1%		
2-ethyl-2-[[(1-oxoallyl)oxy]methy]-1,3-propanediyl diacrylate; 2,2-bis(acryloyloxymethyl)butyl acrylate; trimethylolpropane triacrylate	15625-89-5		1	

Acute Toxicity Estimate

If LD50/LC50 data is not available or does not correspond to the classification category, then the appropriate conversion value from CLP Annex I, Table 3.1.2, is used to calculate the acute toxicity estimate (ATEmix) for classifying a mixture based on its components

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Chemical name	Oral LD50 mg/kg	Dermal LD50	Inhalation LC50 - 4	Inhalation LC50 - 4	Inhalation LC50 - 4
	33	mg/kg		hour - vapor - mg/L	
Isobornyl Acrylate	4890	3000	mg/L		
2-Hydroxyethyl methacrylate	5050	3000			
Acrylic Acid	193	2000	3.6 2.775		
Benzene, (1-methylethenyl)-, homopolymer, ar-(2-hydroxy-2-met hyl-1-oxopropyl) derivs.		2000			
2-ethyl-2-[[(1-oxoallyl)oxy] methyl]-1,3-propanediyl diacrylate; 2,2-bis(acryloyloxymethyl) butyl acrylate; trimethylolpropane triacrylate	5190	5000		77.	57
3-Methacryloxypropyltrimet hoxysilane	23500	2000			
Phosphine oxide, phenylbis(2,4,6-trimethylbe nzoyl)-	2000	2000			

Full text of H- and EUH-phrases: see section 16

This product does not contain candidate substances of very high concern at a concentration >=0.1% (Regulation (EC) No. 1907/2006 (REACH), Article 59)

SECTION 4: First aid measures

4.1. Description of first aid measures

General advice Show this safety data sheet to the doctor in attendance.

Inhalation Remove to fresh air. IF exposed or concerned: Get medical advice/attention. Get medical

attention immediately if symptoms occur.

Eye contact Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Keep eye wide open

while rinsing. Do not rub affected area. Get medical attention if irritation develops and

persists.

May cause an allergic skin reaction. In the case of skin irritation or allergic reactions see a Skin contact

physician. Wash off immediately with soap and plenty of water for at least 15 minutes.

Do NOT induce vomiting. Rinse mouth. Never give anything by mouth to an unconscious Ingestion

person. Call a physician.

Avoid contact with skin, eyes or clothing. Wear personal protective clothing (see section 8). Self-protection of the first aider

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

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Symptoms Itching. Rashes. Hives. May cause redness and tearing of the eyes. Burning sensation.

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

Note to physicians May cause sensitization in susceptible persons. Treat symptomatically,

SECTION 5: Firefighting measures

5.1. Extinguishing media

Use extinguishing measures that are appropriate to local circumstances and the Suitable Extinguishing Media

surrounding environment.

Large Fire CAUTION: Use of water spray when fighting fire may be inefficient.

Unsuitable extinguishing media Do not scatter spilled material with high pressure water streams.

5.2. Special hazards arising from the substance or mixture

Specific hazards arising from the

Product is or contains a sensitizer. May cause sensitization by skin contact.

5.3. Advice for firefighters

Special protective equipment and precautions for fire-fighters

Firefighters should wear self-contained breathing apparatus and full firefighting turnout gear.

Use personal protection equipment.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Personal precautions Avoid contact with skin, eyes or clothing. Ensure adequate ventilation. Use personal

protective equipment as required. Evacuate personnel to safe areas. Keep people away from and upwind of spill/leak.

Other information Refer to protective measures listed in Sections 7 and 8

Use personal protection recommended in Section 8. For emergency responders

6.2. Environmental precautions

Prevent further leakage or spillage if safe to do so. **Environmental precautions**

6.3. Methods and material for containment and cleaning up

Methods for containment Prevent further leakage or spillage if safe to do so.

Methods for cleaning up Take up mechanically, placing in appropriate containers for disposal.

Prevention of secondary hazards Clean contaminated objects and areas thoroughly observing environmental regulations.

6.4. Reference to other sections

Reference to other sections See section 8 for more information. See section 13 for more information.

SECTION 7: Handling and storage

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7.1. Precautions for safe handling

Advice on safe handling

Handle in accordance with good industrial hygiene and safety practice. Avoid contact with skin, eyes or clothing. Ensure adequate ventilation. In case of insufficient ventilation, wear suitable respiratory equipment. Do not eat, drink or smoke when using this product. Take off contaminated clothing and wash before reuse. Avoid breathing vapors or mists. Handle in accordance with good industrial hygiene and safety practice. Ensure adequate ventilation, Protect from light.

General hygiene considerations

Wear suitable gloves and eye/face protection. Do not eat, drink or smoke when using this

product. Avoid contact with skin, eyes or clothing.

7.2. Conditions for safe storage, including any incompatibilities

Storage Conditions

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

closed in a dry and well-ventilated place. Protect from light.

Storage class (TRGS 510)

Storage class 10.

7.3. Specific end use(s)

Risk Management Methods (RMM) The information required is contained in this Safety Data Sheet.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Exposure Limits

Chemical name	European Union	Austria	Belgium	Bulgaria	Croatia
Acrylic Acid	STEL: 59 mg/m ³	TWA: 10 ppm	TWA: 2 ppm	STEL: 59 mg/m ³	TWA: 10 ppm
79-10-7	STEL: 20 ppm	TWA: 29 mg/m ³	TWA: 6.0 mg/m ³	STEL: 20 ppm	TWA: 29 mg/m ³
	TWA: 29 mg/m ³	STEL 20 ppm	STEL: 20 ppm	TWA: 29 mg/m ³	STEL: 20 ppm
	TWA: 10 ppm	STEL 59 mg/m ³	STEL: 59 mg/m ³	TWA: 10 ppm	STEL: 59 mg/m ³
			*		
Chemical name	Cyprus	Czech Republic	Denmark	Estonia	Finland
Acrylic Acid	STEL: 59 mg/m ³	TWA: 30 mg/m ³	TWA: 2 ppm	TWA: 10 ppm	TWA: 2 ppm
79-10-7	STEL: 20 ppm	Ceiling: 60 mg/m ³	TWA: 5.9 mg/m ³	TWA: 29 mg/m ³	TWA: 6 mg/m ³
	TWA: 29 mg/m ³		H*	STEL: 20 ppm	Ceiling: 15 ppm
	TWA: 10 ppm		STEL: 20 ppm 1	STEL: 59 mg/m ³	Ceiling: 45 mg/m ³
			minute		
			STEL: 59 mg/m ³ 1		
			minute		
Chemical name	France	Germany TRGS	minute Germany DFG	Greece	Hungary
Chemical name Isobornyl Acrylate	France -	Germany TRGS		Greece -	Hungary -
	France -	Germany TRGS	Germany DFG	Greece -	Hungary -
Isobornyl Acrylate	France - -	Germany TRGS	Germany DFG	Greece -	Hungary -
Isobornyl Acrylate 5888-33-5	France - -	Germany TRGS	Germany DFG skin sensitizer	Greece - -	Hungary - -
Isobornyl Acrylate 5888-33-5 2-Hydroxyethyl	France - -	Germany TRGS	Germany DFG skin sensitizer	Greece - -	Hungary - -
Isobornyl Acrylate 5888-33-5 2-Hydroxyethyl methacrylate	France TWA: 10 ppm	Germany TRGS - TWA: 10 ppm	Germany DFG skin sensitizer	Greece TWA: 10 ppm	Hungary - TWA: 29 mg/m³
Isobornyl Acrylate 5888-33-5 2-Hydroxyethyl methacrylate 868-77-9	-	-	Germany DFG skin sensitizer skin sensitizer	-	-
Isobornyl Acrylate 5888-33-5 2-Hydroxyethyl methacrylate 868-77-9 Acrylic Acid	TWA: 10 ppm TWA: 29 mg/m³ STEL: 20 ppm	- - TWA: 10 ppm	Germany DFG skin sensitizer skin sensitizer TWA: 10 ppm	- - TWA: 10 ppm	- - TWA: 29 mg/m ³
Isobornyl Acrylate 5888-33-5 2-Hydroxyethyl methacrylate 868-77-9 Acrylic Acid	- - TWA: 10 ppm TWA: 29 mg/m ³	- - TWA: 10 ppm	Germany DFG skin sensitizer skin sensitizer TWA: 10 ppm TWA: 30 mg/m³	- - TWA: 10 ppm TWA: 29 mg/m³	- - TWA: 29 mg/m ³
Isobornyl Acrylate 5888-33-5 2-Hydroxyethyl methacrylate 868-77-9 Acrylic Acid	TWA: 10 ppm TWA: 29 mg/m³ STEL: 20 ppm	- - TWA: 10 ppm	Germany DFG skin sensitizer skin sensitizer TWA: 10 ppm TWA: 30 mg/m³ Peak: 10 ppm	TWA: 10 ppm TWA: 29 mg/m³ STEL: 20 ppm	- - TWA: 29 mg/m ³

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diacrylate; 2,2-bis(acryloyloxymethyl)butyl acrylate; trimethylolpropane triacrylate 15625-89-5					
Chemical name	Ireland	Italy MDLPS	Italy AIDII	Latvia	Lithuania
2-Hydroxyethyl methacrylate 868-77-9		•	-	-	Sensitizer TWA: 20 mg/m³
Acrylic Acid 79-10-7	TWA: 10 ppm TWA: 29 mg/m³ STEL: 20 ppm STEL: 59 mg/m³	TWA: 29 ppm TWA: 10 mg/m³ STEL: 59 ppm STEL: 20 mg/m³ pelle*	TWA: 2 ppm TWA: 6 mg/m ³ *	TWA: 5 mg/m ³ TWA: 1.7 ppm STEL: 59 mg/m ³ STEL: 20 ppm	TWA: 10 ppm TWA: 29 mg/m³ Ceiling: 59 mg/m³ Ceiling: 20 ppm
Chemical name	Luxembourg	Malta	Netherlands	Norway	Poland
2-Hydroxyethyl methacrylate 868-77-9			-	TWA: 2 ppm TWA: 11 mg/m ³ STEL: 4 ppm STEL: 16.5 mg/m ³	
Acrylic Acid 79-10-7	STEL: 59 mg/m ³ STEL: 20 ppm TWA: 29 mg/m ³ TWA: 10 ppm	STEL: 20 ppm STEL: 59 mg/m ³ TWA: 10 ppm TWA: 29 mg/m ³	TWA: 29 mg/m ³ STEL: 59 mg/m ³	TWA: 10 ppm TWA: 29 mg/m ³ STEL: 20 ppm STEL: 59 mg/m ³	STEL: 29.5 mg/m³ TWA: 10 mg/m³ *
Chemical name	Portugal	Romania	Slovakia	Slovenia	Spain
Acrylic Acid 79-10-7	TWA: 10 ppm TWA: 29 mg/m³ STEL: 59 mg/m³ STEL: 20 ppm P*	TWA: 10 ppm TWA: 29 mg/m³ STEL: 20 ppm STEL: 59 mg/m³	TWA: 10 ppm TWA: 29 mg/m³ Ceiling: 59 mg/m³	TWA: 29 mg/m³ TWA: 10 ppm STEL: 20 ppm STEL: 59 mg/m³ *	TWA: 10 ppm TWA: 29 mg/m³ STEL: 20 ppm STEL: 59 mg/m³ vía dérmica*
Chemical name	Sweden	Switzerland	United Kingdom	. All	
Acrylic Acid 79-10-7	NGV: 10 ppm NGV: 29 mg/m³ Bindande KGV: 20 ppm Bindande KGV: 59 mg/m³	TWA: 10 ppm TWA: 29 mg/m³ STEL: 20 ppm STEL: 59 mg/m³	TWA: 10 ppm TWA: 29 mg/m³ STEL: 20 ppm STEL: 59 mg/m³		

Biological occupational exposure limits

This product, as supplied, does not contain any hazardous materials with biological limits established by the region specific regulatory bodies.

Derived No Effect Level (DNEL) - Workers

No information available

Derived No Effect Level (DNEL) - General Public

No information available.

Predicted No Effect Concentration (PNEC)

No information available.

8.2. Exposure controls

Engineering controls No information available.

Personal protective equipment

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Eye/face protection	Wear safety glasses with side shields (or goggles).
Hand protection	Wear suitable gloves. Nitrile rubber, Butyl rubber.
Skin and body protection	Wear suitable protective clothing. Long sleeved clothing.
Respiratory protection	No protective equipment is needed under normal use conditions. If exposure limits are exceeded or irritation is experienced, ventilation and evacuation may be required.
General hygiene considerations	Wear suitable gloves and eye/face protection. Do not eat, drink or smoke when using this

Wear suitable gloves and eye/face protection. Do not eat, drink or smoke when using this

product. Avoid contact with skin, eyes or clothing.

No information available. **Environmental exposure controls**

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state Liquid Appearance opaque off-white white to Odor Characteristic. No information available Odor threshold

Remarks • Method Property Values Melting point / freezing point No data available None known Boiling point / boiling range No data available None known Flammability (solid, gas) Flammability Limit in Air No data available None known None known

Upper flammability or explosive No data available limits
Lower flammability or explosive No data available

limits Flash point 101 - °C

Pensky-Martens Closed Cup (PMCC) 438 °C None known Autoignition temperature None known **Decomposition temperature** No data available None known pH (as aqueous solution) No data available None known

Kinematic viscosity
Dynamic viscosity No data available None known 60,000 cP None known Water solubility No data available None known Solubility(ies) No data available None known Partition coefficient No data available None known No data available Vapor pressure None known None known

Relative density No data available **Bulk density** No data available Liquid Density No data available Relative vapor density No data available None known

Particle characteristics No information available Particle Size Particle Size Distribution No information available

9.2. Other information

9.2.1. Information with regard to physical hazard classes Not applicable

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9.2.2. Other safety characteristics

No information available

SECTION 10: Stability and reactivity

10.1. Reactivity

Reactivity No information available.

10.2. Chemical stability

Stability Stable under normal conditions.

Explosion data

Sensitivity to mechanical impact None. Sensitivity to static discharge

10.3. Possibility of hazardous reactions

Possibility of hazardous reactions None under normal processing

10.4. Conditions to avoid

Conditions to avoid None known based on information supplied

10.5. Incompatible materials

Strong acids. Strong bases. Strong oxidizing agents. Incompatible materials

10.6. Hazardous decomposition products

Hazardous decomposition products None known based on information supplied.

SECTION 11: Toxicological information

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

Information on likely routes of exposure

Product Information

Inhalation Specific test data for the substance or mixture is not available. May cause irritation of

respiratory tract

Eye contact Specific test data for the substance or mixture is not available. Causes serious eye irritation.

(based on components). May cause redness, itching, and pain.

Skin contact May cause sensitization by skin contact. Specific test data for the substance or mixture is

not available. Repeated or prolonged skin contact may cause allergic reactions with susceptible persons, (based on components). Causes skin irritation.

Specific test data for the substance or mixture is not available. Ingestion may cause

Ingestion gastrointestinal irritation, nausea, vomiting and diarrhea.

Symptoms related to the physical, chemical and toxicological characteristics

Itching. Rashes. Hives. Redness. May cause redness and tearing of the eyes. Symptoms

Acute toxicity

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Numerical measures of toxicity

The following values are calculated based on chapter 3.1 of the GHS document

ATEmix (oral) 13,320.10 mg/kg
ATEmix (dermal) 15,901.50 mg/kg
ATEmix (inhalation-dust/mist) 168.20 mg/l

Component Information

Chemical name	Oral LD50	Dermal LD50	Inhalation LC50
Isobornyl Acrylate	= 4890 mg/kg (Rat)	> 3000 mg/kg (Rabbit)	- Illiaduoli E030
2-Hydroxyethyl methacrylate	= 5050 mg/kg (Rat)	> 3000 mg/kg (Rabbit)	
Acrylic Acid	= 193 mg/kg (Rat)	> 2000 mg/kg (Rabbit)	= 11.1 mg/L (Rat) 1 h = 3.6 mg/L (Rat) 4 h
Benzene, (1-methylethenyl)-, homopolymer, ar-(2-hydroxy-2-methyl- 1-oxopropyl) derivs.		= 2000 mg/kg(Rat)	
-ethyl-2-[[(1-oxoallyl)oxy]methy]-1,3-propanediyl diacrylate; 2,2-bis(acryloyloxymethyl)butyl acrylate; trimethylolpropane triacrylate	= 5190 mg/kg(Rat)	= 5000 mg/kg (Rabbit)	
B-Methacryloxypropyltrimethoxy silane	= 23.5 g/kg (Rat)	> 2000 mg/kg (Rat)	> 2.28 mg/L (Rat)6 h
Phosphine oxide, henylbis(2,4,6-trimethylbenzoyl)-	> 2000 mg/kg (Rat)	> 2000 mg/kg (Rat)	7//16/

Delayed and immediate effects as well as chronic effects from short and long-term exposure

Skin corrosion/irritation Classification based on data available for ingredients. Causes skin irritation. May cause skin

irritation

Serious eye damage/eye irritation Classification based on data available for ingredients. Causes serious eye irritation.

Respiratory or skin sensitization May cause an allergic skin reaction.

Germ cell mutagenicity

No information available.

Carcinogenicity

No information available.

The table below indicates whether each agency has listed any ingredient as a carcinogen.

Chemical name	European Union
2-ethyl-2-[[(1-oxoallyl)oxy]methyl]-1,3-propanediyl diacrylate;	Carc. 2
2,2-bis(acryloyloxymethyl)butyl acrylate; trimethylolpropane	
triacrylate	

Reproductive toxicity No information available.

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STOT - single exposure

May cause respiratory irritation.

STOT - repeated exposure

No information available.

Aspiration hazard

No information available.

11.2. Information on other hazards

11.2.1. Endocrine disrupting properties

Endocrine disrupting properties No information available.

11.2.2. Other information

Other adverse effects

No information available.

SECTION 12: Ecological information

12.1. Toxicity

Ecotoxicity

Chemical name	Algae/aquatic plants	Fish	Toxicity to microorganisms	Crustacea
Isobornyl Acrylate	ErC 50 = 2.7 mg/L 96h (Pseudokirchneriella subcapitata)	LC50: =0.704mg/L 96h (Danio rerio)		EC 50 = 1.1 mg/L 48 h (Daphnia magna)
2-Hydroxyethyl methacrylate	-	LC50: 213 - 242mg/L (96h, Pimephales promelas) LC50: =227mg/L (96h, Pimephales promelas)		EC50 > 380 mg/l 48 h (Daphnia magna)
Acrylic Acid	EC50: =0.04mg/L (72h, Desmodesmus subspicatus) EC50: =0.17mg/L (96h, Pseudokirchneriella subcapitata)	LC50: =222mg/L (96h, Brachydanio rerio) NOEC: >= 10.1mg/L (45d, Oryzias latipes, OECD 210)		EC50:=95mg/L (48h, Daphnia magna) NOEC: =3.8mg/L (21d, Daphnia magna)
3-Methacryloxypropyltrim ethoxysilane	EC50 > 536,00 mg/l 72 h (Scenedesmus subspicatus)	LC50: >100mg/L (96h Danio rerio)		EC50 > 876,00 mg/l 48 h (Daphnia magna)
Phosphine oxide, phenylbis(2,4,6-trimethyl benzoyl)-	-	LC50: >90µg/L (96h, Danio rerio)	-	-

12.2. Persistence and degradability

Persistence and degradability

No information available.

12.3. Bioaccumulative potential

Bioaccumulation

Component Information

Chemical name	Partition coefficient
Isobornyl Acrylate	4.52
2-Hydroxyethyl methacrylate	0.42
Acrylic Acid	0.46

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Benzene, (1-methylethenyl)-, homopolymer, ar-(2-hydroxy-2-methyl-1-oxopropyl) derivs.	4.53
2-ethyl-2-[[(1-oxoallyl)oxy]methyl]-1,3-propanediyl diacrylate; 2,2-bis(acryloyloxymethyl)butyl acrylate; trimethylolpropane triacrylate	0.67
3-Methacryloxypropyltrimethoxysilane	2.1
Phosphine oxide, phenylbis(2,4,6-trimethylbenzoyl)-	5.8

12.4. Mobility in soil

Mobility in soil

No information available.

12.5. Results of PBT and vPvB assessment

PBT and vPvB assessment

The product does not contain any substance(s) classified as PBT or vPvB above the

threshold of declaration.

Chemical name	PBT and vPvB assessment	
Isobornyl Acrylate	The substance is not PBT / vPvB	
2-Hydroxyethyl methacrylate	The substance is not PBT / vPvB	
Acrylic Acid	The substance is not PBT / vPvB	
Benzene, (1-methylethenyl)-, homopolymer,	The substance is not PBT / vPvB	
ar-(2-hydroxy-2-methyl-1-oxopropyl) derivs.		
2-ethyl-2-[[(1-oxoallyl)oxy]methyl]-1,3-propanediyl diacrylate;	The substance is not PBT / vPvB	
2,2-bis(acryloyloxymethyl)butyl acrylate; trimethylolpropane triacrylate		
3-Methacryloxypropyltrimethoxysilane	The substance is not PBT / vPvB	
Phosphine oxide, phenylbis(2,4,6-trimethylbenzoyl)-	The substance is not PBT / vPvB	

12.6. Endocrine disrupting properties

Endocrine disrupting properties

No information available.

12.7. Other adverse effects

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Waste from residues/unused products

Dispose of waste in accordance with environmental legislation. Dispose of in accordance

with local regulations.

Do not reuse empty containers. Contaminated packaging

SECTION 14: Transport information

14.1 UN number or ID number 14.2 Extended Proper Shipping

Not regulated Not regulated

Name

Not regulated

14.3 Transport hazard class(es)

Not regulated

14.4 Packing group 14.5 Environmental hazards

Not applicable

14.6 Special precautions for user

Special Provisions

None

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IMDG

14.1 UN number or ID number 14.2 Extended Proper Shipping Name

Not regulated Not regulated

14.3 Transport hazard class(es) 14.4 Packing group 14.5 Environmental hazards

Not regulated Not regulated Not applicable

14.6 Special precautions for user Special Provisions

None

14.7 Maritime transport in bulk according to IMO instruments

No information available

RID
14.1 UN number or ID number
14.2 Extended Proper Shipping
Name

Not regulated Not regulated

14.3 Transport hazard class(es)
14.4 Packing group
14.5 Environmental hazards

Not regulated Not regulated Not applicable

14.6 Special precautions for user Special Provisions

None

ADR

14.1 UN number or ID number 14.2 Extended Proper Shipping Name 14.3 Transport hazard class(es) Not regulated Not regulated Not regulated

14.4 Packing group
14.5 Environmental hazards
14.6 Special precautions for user

Not regulated Not applicable

Special Provisions N

None

SECTION 15: Regulatory information

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

National regulations

France

Occupational Illnesses (R-463-3, France)

Chemical name	French RG number
2-Hydroxyethyl methacrylate - 868-77-9	RG 65
	-

Germany

Water hazard class (WGK) obviously hazardous to water (WGK 2) Classification according to AwSV.

European Union

Take note of Directive 98/24/EC on the protection of the health and safety of workers from the risks related to chemical agents at work.

Authorizations and/or restrictions on use:

This product contains one or more substance(s) subject to restriction (Regulation (EC) No. 1907/2006 (REACH), Annex XVII)

Chemical name	Restricted substance per REACH	Substance subject to authorization per
	Annex XVII	REACH Annex XIV

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2-Hydroxyethyl methacrylate - 868-77-9	75.	=
Acrylic Acid - 79-10-7	75.	
2-ethyl-2-[[(1-oxoallyl)oxy]methyl]-1,3-propanediyl	75.	=
diacrylate; 2,2-bis(acryloyloxymethyl)butyl acrylate;		
trimethylolpropane triacrylate - 15625-89-5		
Phosphine oxide, phenylbis(2,4,6-trimethylbenzoyl)-	75.	-
- 162881-26-7		

Persistent Organic Pollutants

Not applicable

Ozone-depleting substances (ODS) regulation (EC) 1005/2009

Not applicable

International Inventories TSCA Complies DSL/NDSL Complies **EINECS/ELINCS** Complies Complies **ENCS**

IECSC Simplified Notification

KECL Complies **PICCS** Not Listed AIIC Not Listed **NZIoC** Not Listed

<u>Legend:</u>
TSCA - United States Toxic Substances Control Act Section 8(b) Inventory

DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List

EINECS/ELINCS - European Inventory of Existing Chemical Substances/European List of Notified Chemical Substances

ENCS - Japan Existing and New Chemical Substances
IECSC - China Inventory of Existing Chemical Substances

KECL - Korean Existing and Evaluated Chemical Substances

PICCS - Philippines Inventory of Chemicals and Chemical Substances

AlICS - Australian Industrial Chemicals Introduction Scheme
NZIoC - New Zealand Inventory of Chemicals

15.2. Chemical safety assessment

Chemical Safety Report No information available

SECTION 16: Other information

Key or legend to abbreviations and acronyms used in the safety data sheet

Full text of H-Statements referred to under section 3

H226 - Flammable liquid and vapor

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

H319 - Causes serious eye irritation H332 - Harmful if inhaled

H335 - May cause respiratory irritation

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H361f - Suspected of damaging fertility

H400 - Very toxic to aquatic life

H410 - Very toxic to aquatic life with long lasting effects H413 - May cause long lasting harmful effects to aquatic life

SVHC: Substances of Very High Concern for Authorization: PBT: Persistent, Bioaccumulative, and Toxic (PBT) Chemicals vPvB: Very Persistent and very Bioaccumulative (vPvB) Chemicals

Legend Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

TWA (time-weighted average) STEL (Short Term Exposure Limit)

Ceiling Maximum limit value Skin designation Sensitizers

Classification procedure Classification according to Regulation (EC) No. 1272/2008 [CLP] Method Used Acute oral toxicity Calculation method Calculation method Acute dermal toxicity Acute inhalation toxicity - gas Calculation method Acute inhalation toxicity - vapor Calculation method Acute inhalation toxicity - dust/mist Calculation method Skin corrosion/irritation Calculation method Serious eye damage/eye irritation Calculation method Respiratory sensitization Calculation method Skin sensitization Calculation method Mutagenicity Calculation method Carcinogenicity Calculation method Reproductive toxicity Calculation method STOT - single exposure Calculation method STOT - repeated exposure Calculation method Acute aquatic toxicity Chronic aquatic toxicity On basis of test data On basis of test data Aspiration hazard Calculation method Calculation method Ozone

Key literature references and sources for data used to compile the SDS Agency for Toxic Substances and Disease Registry (ATSDR)

U.S. Environmental Protection Agency ChemView Database

European Food Safety Authority (EFSA)
European Chemicals Agency (ECHA) Committee for Risk Assessment (ECHA_RAC)

European Chemicals Agency (ECHA) (CHA_API)
EPA (Environmental Protection Agency)

Acute Exposure Guideline Level(s) (AEGL(s))

U.S. Environmental Protection Agency Federal Insecticide, Fungicide, and Rodenticide Act

U.S. Environmental Protection Agency High Production Volume Chemicals

Food Research Journal

Hazardous Substance Database

International Uniform Chemical Information Database (IUCLID)

National Institute of Technology and Evaluation (NITE)

Australia National Industrial Chemicals Notification and Assessment Scheme (NICNAS)

NIOSH (National Institute for Occupational Safety and Health) National Library of Medicine's ChemID Plus (NLM CIP)

National Library of Medicine's PubMed database (NLM PUBMED)

National Toxicology Program (NTP)

New Zealand's Chemical Classification and Information Database (CCID)

Organization for Economic Co-operation and Development Environment, Health, and Safety Publications Organization for Economic Co-operation and Development High Production Volume Chemicals Program

Organization for Economic Co-operation and Development Screening Information Data Set

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World Health Organization

Revision date 28-Apr-2023

This material safety data sheet complies with the requirements of Regulation (EC) No. 1907/2006 Disclaimer

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End of Safety Data Sheet



