

#### **Manufacturer:**

Dymax

#### **Product Name:**

Dymax OP-29V UV Optical Adhesive (3ml)

#### **Manufacturer Part Number:**

OP-29V-3ML

Click here for more details on the Dymax OP-29V UV Optical Adhesive (3ml)



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-29V**

Issuing Date 06-Jul-2023 Revision date 06-Jul-2023 Revision Number 34

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

1.1. Product identifier

Product Name OP-29V

Unique Formula Identifier (UFI) T441-603Y-0003-DCH8

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

ManufacturerManufacturing sitesSupplierDymax CorporationDymax Asia Pacific Pte Ltd.Dymax Asia Pacific Pte Ltd.318 Industrial LaneBlock 5008 (East Wing)Block 5008 (East Wing)Apg Mo Kio Ave 5Apg Mo Kio Ave 5

Torrington, CT 06790 Ang Mo Kio Ave. 5 Ang Mo Kio Ave. 5
Tel: 860-482-1010 #05-3 TECHplace II #05-3 TECHplace II
Fax: 860-496-0608 Singapore 569874 Singapore 569874
Tel: +65-6752-2887 Tel: +65-6752-2887
Fax: +65-6752-2813 Fax: +65-6752-2813

For further information, please contact

1.4. Emergency telephone number

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







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#### SECTION 2: Hazards identification

#### 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 1 - (H317)
Specific target organ toxicity (single exposure)	Category 3 - (H335)
Category 3 - Respiratory irritation	

#### 2.2. Label elements



#### Signal word - Warning

Contains Isobornyl Acrylate, 2-Hydroxyethyl methacrylate, 2-Propenoic acid, 2-(2-ethoxyethoxy)ethyl ester, Acrylic Acid

### Hazard statements

H315 - Causes skin irritation

H317 - May cause an allergic skin reaction

H319 - Causes serious eye irritation

H335 - May cause respiratory irritation

EUH208 - Contains 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

Data is subject to change without notice.





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3.1 Substances

Not applicable

#### 3.2 Mixtures

Chemical name	CAS	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	25-39	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	10-24	Skin Irrit. 2 (H315) Eye Irrit. 2 (H319) Skin Sens. 1 (H317)
2-Propenoic acid, 2-(2-ethoxyethoxy)ethyl ester	7328-17-8	230-811-7	•	3-<5	Acute Tox.4 (H302) Acute Tox.3 (H311) Skin Irrit. 2 (H315) Eye Irrit. 2 (H319) Skin Sens. 1 (H317) Chronic Aquatic 2 (H411)
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)
3-Methacryloxypropyltrimethoxy silane	2530-85-0	219-785-8	-	<1	Skin Sens. 1 (H317)
Diphenyl (2,4,6-trimethylbenzoyl) phosphine oxide	75980-60-8	(015-203-00-X) 278-355-8	-	<1	Repr. 2 (H361f)

Chemical name	CAS	Specific concentration limit (SCL)	M-Factor	M-Factor (long-term)
Acrylic Acid	79-10-7	STOT SE 3 :: C>=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

Chemical name	Oral LD50 mg/kg	Dermal LD50 mg/kg	Inhalation LC50 - 4 hour - vapor - mg/L	Inhalation LC50 - 4 hour - gas - ppm
Isobornyl Acrylate	4890	3000		
2-Hydroxyethyl methacrylate	5050	3000		
2-Propenoic acid,		2000		
2-(2-ethoxyethoxy)eth yl ester		1000		

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Chemical name	Oral LD50 mg/kg	Dermal LD50 mg/kg		Inhalation LC50 - 4 hour - vapor - mg/L	
Acrylic Acid	193	2000	3.6 2.775		
3-Methacryloxypropyltrimet hoxysilane	23500	2000			
Diphenyl (2,4,6-trimethylbenzoyl) phosphine oxide		2000			

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

This product contains one or more candidate substance(s) of very high concern (Regulation (EC) No. 1907/2006 (REACH), Article 59)

Jaj		
Chemical name	CAS	SVHC candidates
Diphenyl (2,4,6-trimethylbenzoyl)	75980-60-8	X
phosphine oxide		

### **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.

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

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

**Ingestion**Do NOT induce vomiting. Rinse mouth. Never give anything by mouth to an unconscious person. Call a physician.

Avoid contact with skin, eyes or clothing. Wear personal protective clothing (see section 8).

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

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

Self-protection of the first aider

Data is subject to change without notice.





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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

chemical

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.

6.2. Environmental precautions

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

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

#### 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.







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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**

European Union	Austria	Belgium	Bulgaria	Croatia
STEL: 59 mg/m <sup>3</sup>	TWA: 10 ppm	TWA: 2 ppm	STEL: 59 mg/m <sup>3</sup>	TWA: 10 ppm
STEL: 20 ppm	TWA: 29 mg/m <sup>3</sup>	TWA: 6.0 mg/m <sup>3</sup>	STEL: 20 ppm	TWA: 29 mg/m <sup>3</sup>
TWA: 29 mg/m <sup>3</sup>	STEL 20 ppm	STEL: 20 ppm	TWA: 29 mg/m <sup>3</sup>	STEL: 20 ppm
TWA: 10 ppm	STEL 59 mg/m <sup>3</sup>	STEL: 59 mg/m <sup>3</sup>	TWA: 10 ppm	STEL: 59 mg/m <sup>3</sup>
• • •	ŭ	*		
Cyprus	Czech Republic	Denmark	Estonia	Finland
STEL: 59 mg/m <sup>3</sup>	TWA: 30 mg/m <sup>3</sup>	TWA: 2 ppm	TWA: 10 ppm	TWA: 2 ppm
STEL: 20 ppm	Ceiling: 60 mg/m <sup>3</sup>	TWA: 5.9 mg/m <sup>3</sup>	TWA: 29 mg/m <sup>3</sup>	TWA: 6 mg/m <sup>3</sup>
TWA: 29 mg/m <sup>3</sup>	0 0	H*	STEL: 20 ppm	Ceiling: 15 ppm
TWA: 10 ppm		STEL: 20 ppm 1	STEL: 59 mg/m <sup>3</sup>	Ceiling: 45 mg/m <sup>3</sup>
• • •		minute	· ·	
		STEL: 59 mg/m <sup>3</sup> 1		
		minute		
France	Germany TRGS	Germany DFG	Greece	Hungary
-	-	skin sensitizer	-	-
-	-	skin sensitizer	-	-
TWA: 10 ppm	TWA: 10 ppm	TWA: 10 ppm	TWA: 10 ppm	TWA: 29 mg/m <sup>3</sup>
TWA: 29 mg/m <sup>3</sup>	TWA: 30 mg/m <sup>3</sup>	TWA: 30 mg/m <sup>3</sup>	TWA: 29 mg/m <sup>3</sup>	STEL: 59 mg/m <sup>3</sup>
STEL: 20 ppm	_	Peak: 10 ppm	STEL: 20 ppm	-
STEL: 59 mg/m <sup>3</sup>		Peak: 30 mg/m <sup>3</sup>	STEL: 59 mg/m <sup>3</sup>	
Ireland	Italy MDLPS	Italy AIDII	Latvia	Lithuania
-	-	-	-	Sensitizer
				TWA: 20 mg/m <sup>3</sup>
TWA: 10 ppm	TWA: 29 ppm	TWA: 2 ppm	TWA: 5 mg/m <sup>3</sup>	TWA: 10 ppm
TWA: 29 mg/m <sup>3</sup>	TWA: 10 mg/m <sup>3</sup>	TWA: 6 mg/m <sup>3</sup>	TWA: 1.7 ppm	TWA: 29 mg/m <sup>3</sup>
STEL: 20 ppm	STEL: 59 ppm	*	STEL: 59 mg/m <sup>3</sup>	Ceiling: 59 mg/m <sup>3</sup>
STEL: 20 ppm STEL: 59 mg/m <sup>3</sup>	STEL: 59 ppm STEL: 20 mg/m <sup>3</sup>	*	STEL: 59 mg/m <sup>3</sup> STEL: 20 ppm	Ceiling: 59 mg/m³   Ceiling: 20 ppm
	STEL: 20 ppm TWA: 29 mg/m³ TWA: 10 ppm  Cyprus  STEL: 59 mg/m³ STEL: 20 ppm TWA: 29 mg/m³ TWA: 10 ppm  France  -  TWA: 10 ppm TWA: 29 mg/m³ STEL: 20 ppm TWA: 29 mg/m³  TWA: 10 ppm TWA: 29 mg/m³ STEL: 59 mg/m³  TEL: 59 mg/m³  Ireland  -	STEL: 59 mg/m³         TWA: 10 ppm           STEL: 20 ppm         TWA: 29 mg/m³           TWA: 29 mg/m³         STEL 20 ppm           TWA: 10 ppm         STEL 59 mg/m³           STEL: 59 mg/m³         TWA: 30 mg/m³           STEL: 20 ppm         TWA: 30 mg/m³           TWA: 10 ppm         TWA: 30 mg/m³           TWA: 10 ppm         TWA: 30 mg/m³           TWA: 29 mg/m³         TWA: 30 mg/m³           STEL: 20 ppm         TWA: 30 mg/m³           STEL: 20 ppm         TWA: 30 mg/m³           STEL: 59 mg/m³         TWA: 30 mg/m³           STEL: 20 ppm         TWA: 30 mg/m³           STEL: 20 ppm         TWA: 30 mg/m³           STEL: 59 mg/m³         TWA: 30 mg/m³	STEL: 59 mg/m³         TWA: 10 ppm         TWA: 2 ppm           STEL: 20 ppm         TWA: 29 mg/m³         STEL: 20 ppm           TWA: 10 ppm         STEL 20 ppm         STEL: 20 ppm           STEL: 59 mg/m³         STEL: 59 mg/m³         STEL: 20 ppm           STEL: 20 ppm         TWA: 30 mg/m³         TWA: 2 ppm           TWA: 10 ppm         TWA: 30 mg/m³         TWA: 5.9 mg/m³           TWA: 10 ppm         TWA: 5.9 mg/m³         TWA: 5.9 mg/m³           TWA: 5.9 mg/m³         TWA: 5.9 mg/m³         TWA: 5.9 mg/m³           TWA: 10 ppm         TWA: 30 mg/m³         TWA: 30 mg/m³           TWA: 30 mg/m³         TWA: 30 mg/m³         TWA: 30 mg/m³           STEL: 20 ppm         TWA: 30 mg/m³         TWA: 30 mg/m³           TWA: 29 mg/m³         TWA: 30 mg/m³         Peak: 10 ppm           TWA: 30 mg/m³         Peak: 30 mg/m³           Italy MDLPS         Italy AIDII           TWA: 10 ppm         TWA: 29 ppm           TWA: 29 mg/m³         TWA: 2 ppm           TWA: 29 mg/m³         TWA: 6 mg/m³	STEL: 59 mg/m³         TWA: 10 ppm         TWA: 2 ppm         STEL: 20 ppm         TWA: 29 mg/m³         STEL: 20 ppm         STEL: 20 ppm         TWA: 29 mg/m³         TWA: 29 mg/m³         TWA: 29 mg/m³         TWA: 29 mg/m³         TWA: 10 ppm         TWA: 10 ppm         TWA: 10 ppm         TWA: 10 ppm         TWA: 29 ppm         TWA: 10 ppm         TWA: 29 mg/m³         TWA: 29 mg/m³         STEL: 59 mg/m³         STEL: 59 mg/m³         STEL: 20 ppm         TWA: 10 ppm         TWA: 10 ppm         TWA: 29 mg/m³         STEL: 59 mg/m³

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Chemical name	Luxembourg	Malta	Netherlands	Norway	Poland
2-Hydroxyethyl	-	-	-	TWA: 2 ppm	-
methacrylate				TWA: 11 mg/m <sup>3</sup>	
868-77-9				STEL: 4 ppm	
				STEL: 16.5 mg/m <sup>3</sup>	
Acrylic Acid	STEL: 59 mg/m <sup>3</sup>	STEL: 20 ppm	TWA: 29 mg/m <sup>3</sup>	TWA: 10 ppm	STEL: 29.5 mg/m <sup>3</sup>
79-10-7	STEL: 20 ppm	STEL: 59 mg/m <sup>3</sup>	STEL: 59 mg/m <sup>3</sup>	TWA: 29 mg/m <sup>3</sup>	TWA: 10 mg/m <sup>3</sup>
	TWA: 29 mg/m <sup>3</sup>	TWA: 10 ppm		STEL: 20 ppm	*
	TWA: 10 ppm	TWA: 29 mg/m <sup>3</sup>		STEL: 59 mg/m <sup>3</sup>	
Chemical name	Portugal	Romania	Slovakia	Slovenia	Spain
Acrylic Acid	TWA: 10 ppm	TWA: 10 ppm	TWA: 10 ppm	TWA: 29 mg/m <sup>3</sup>	TWA: 10 ppm
79-10-7	TWA: 29 mg/m <sup>3</sup>	TWA: 29 mg/m <sup>3</sup>	TWA: 29 mg/m <sup>3</sup>	TWA: 10 ppm	TWA: 29 mg/m <sup>3</sup>
	STEL: 59 mg/m <sup>3</sup>	STEL: 20 ppm	Ceiling: 59 mg/m <sup>3</sup>	STEL: 20 ppm	STEL: 20 ppm
	STEL: 20 ppm	STEL: 59 mg/m <sup>3</sup>		STEL: 59 mg/m <sup>3</sup>	STEL: 59 mg/m <sup>3</sup>
	P*			*	vía dérmica*
Chemical name	Sweden	Switzerland	United Kingdom		
Acrylic Acid	NGV: 10 ppm	TWA: 10 ppm	TWA: 10 ppm		
79-10-7	NGV: 29 mg/m <sup>3</sup>	TWA: 29 mg/m <sup>3</sup>	TWA: 29 mg/m <sup>3</sup>		
	Bindande KGV: 20	STEL: 20 ppm	STEL: 20 ppm		
	ppm	STEL: 59 mg/m <sup>3</sup>	STEL: 59 mg/m <sup>3</sup>		
	Bindande KGV: 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

Eye/face protectionWear safety glasses with side shields (or goggles).Hand protectionWear 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

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product. Avoid contact with skin, eyes or clothing.

Environmental exposure controls No information available.

### SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state Liquid
Appearance transparent

Color colorless light yellow to
Odor Characteristic.
Odor threshold No information available

Property Values Remarks • Method

Melting point / freezing point

No data available
None known
No data available
None known
No data available
None known
None known
None known
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)
Autoignition temperature 438 °C None known

None known

**Decomposition temperature** None known No data available None known pH (as aqueous solution) No data available None known Kinematic viscosity No data available None known Dynamic viscosity 2,500 cP None known No data available Water solubility None known No data available None known

 Water solubility
 No data available
 None known

 Solubility(ies)
 No data available
 None known

 Partition coefficient
 No data available
 None known

 Vapor pressure
 No data available
 None known

 Relative density
 No data available
 None known

 Bulk density
 No data available

Liquid Density No data available Relative vapor density No data available

Particle characteristics

Particle Size No information available Particle Size Distribution No information available

9.2. Other information

9.2.1. Information with regard to physical hazard classes

Not applicable

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







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Stability Stable under normal conditions.

**Explosion data** 

Sensitivity to mechanical impact None. Sensitivity to static discharge None.

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

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

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.

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

gastrointestinal irritation, nausea, vomiting and diarrhea.

Symptoms related to the physical, chemical and toxicological characteristics

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

Acute toxicity

Numerical measures of toxicity

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

 ATEmix (oral)
 6,321.20
 mg/kg

 ATEmix (dermal)
 6,014.00
 mg/kg

 ATEmix (inhalation-gas)
 99,999.00
 ppm

 ATEmix (inhalation-vapor)
 99,999.00
 mg/l







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ATEmix (inhalation-dust/mist) 115.60 mg/l

**Component Information** 

Component information			
Chemical name	Oral LD50	Dermal LD50	Inhalation LC50
Isobornyl Acrylate	= 4890 mg/kg (Rat)	> 3000 mg/kg ( Rabbit )	-
2-Hydroxyethyl methacrylate	= 5050 mg/kg (Rat)	> 3000 mg/kg (Rabbit)	-
2-Propenoic acid, 2-(2-ethoxyethoxy)ethyl ester	-	> 2000 mg/kg (Rabbit) 1000 - 2000 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
3-Methacryloxypropyltrimethoxy silane	= 23.5 g/kg (Rat)	> 2000 mg/kg (Rat)	> 2.28 mg/L (Rat)6 h
Diphenyl (2,4,6-trimethylbenzoyl) phosphine oxide	-	> 2000 mg/kg ( Rat )	-

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.

Reproductive toxicity No information available.

The table below indicates ingredients above the cut-off threshold considered as relevant which are listed as reproductive toxins.

Chemical name	European Union
Diphenyl (2,4,6-trimethylbenzoyl) phosphine oxide	Repr. 2

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

Data is subject to change without notice.





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Dymax

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Other adverse effects No information available.

#### **SECTION 12: Ecological information**

#### 12.1. Toxicity

**Ecotoxicity** 

The environmental impact of this product has not been fully investigated.

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)
Diphenyl (2,4,6-trimethylbenzoyl) phosphine oxide	-	LC50 10 mg/l 48 h (Oryzias latipes)	-	-

#### 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
2-Propenoic acid, 2-(2-ethoxyethoxy)ethyl ester	1.2
Acrylic Acid	0.46
3-Methacryloxypropyltrimethoxysilane	2.1
Diphenyl (2,4,6-trimethylbenzoyl) phosphine oxide	3.1

### 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.

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Chemical name	PBT and vPvB assessment
Isobornyl Acrylate	The substance is not PBT / vPvB
2-Hydroxyethyl methacrylate	The substance is not PBT / vPvB
2-Propenoic acid, 2-(2-ethoxyethoxy)ethyl ester	The substance is not PBT / vPvB
Acrylic Acid	The substance is not PBT / vPvB
3-Methacryloxypropyltrimethoxysilane	The substance is not PBT / vPvB
Diphenyl (2,4,6-trimethylbenzoyl) phosphine oxide	The substance is not PBT / vPvB

#### 12.6. Endocrine disrupting properties

**Endocrine disrupting properties** No information available.

#### 12.7. Other adverse effects

No information available.

### **SECTION 13: Disposal considerations**

#### 13.1. Waste treatment methods

Waste from residues/unused products

Dispose of in accordance with local regulations. Dispose of waste in accordance with

environmental legislation.

Contaminated packaging Do not reuse empty containers.

### **SECTION 14: Transport information**

IATA

14.1 UN number or ID number Not regulated 14.2 Extended Proper Shipping Not regulated

Name

14.3 Transport hazard class(es) Not regulated 14.4 Packing group Not regulated 14.5 Environmental hazards Not applicable

14.6 Special precautions for user

**Special Provisions** None

**IMDG** 

14.1 UN number or ID number 14.2 Extended Proper Shipping Not regulated Not regulated Name

14.3 Transport hazard class(es) Not regulated 14.4 Packing group Not regulated 14.5 Environmental hazards Not applicable

14.6 Special precautions for user **Special Provisions** 

14.7 Maritime transport in bulk No information available

according to IMO instruments

14.1 UN number or ID number Not regulated 14.2 Extended Proper Shipping Not regulated

Name

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14.3 Transport hazard class(es) Not regulated 14.4 Packing group Not regulated Not applicable 14.5 Environmental hazards 14.6 Special precautions for user None

**Special Provisions** 

ADR 14.1 UN number or ID number Not regulated 14.2 Extended Proper Shipping Not regulated Name

Not regulated 14.3 Transport hazard class(es) 14.4 Packing group Not regulated 14.5 Environmental hazards Not applicable 14.6 Special precautions for user

**Special Provisions** 

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	7-9 RG 65

#### Netherlands

Chemical name	Netherlands - List of Carcinogens	Netherlands - List of Mutagens	Netherlands - List of Reproductive Toxins
Diphenyl (2,4,6-trimethylbenzoyl)	-	-	Fertility Category 2
phosphine oxide			

#### **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

#### 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 Annex XVII	Substance subject to authorization per REACH Annex XIV
2-Hydroxyethyl methacrylate - 868-77-9	75.	-
Acrylic Acid - 79-10-7	75.	-
Diphenyl (2,4,6-trimethylbenzoyl) phosphine oxide -	75.	-
75980-60-8		

**Persistent Organic Pollutants** 

Not applicable







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

Not applicable

International Inventories
TSCA

Complies DSL/NDSL Complies EINECS/ELINCS Complies **ENCS** Complies **IECSC** Complies **KECL** Complies Not Listed **PICCS AIIC** Complies Complies **NZIoC** 

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

AIICS - 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

H311 - Toxic in contact with skin 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

H361f - Suspected of damaging fertility

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

#### Leaend

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

vPvB: Very Persistent and very Bioaccumulative (vPvB) Chemicals

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#### Legend Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

TWA TWA (time-weighted average) STEL 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		
Acute dermal toxicity	Calculation method		
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	On basis of test data		
Chronic aquatic toxicity	On basis of test data		
Aspiration hazard	Calculation method		
Ozone	Calculation method		

#### 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) (ECHA\_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

World Health Organization

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

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information, and belief at the

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End of Safety Data Sheet

