

### **Manufacturer:**

Dymax®

## **Product Name:**

Dymax OP-54 UV Optical Adhesive (3ml)

## **Manufacturer Part Number:**

OP-54-3ML

Click here for more details on the Dymax OP-54 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-54**

Issuing Date 27-Apr-2023 Revision date 27-Apr-2023 Revision Number 2

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

1.1. Product identifier

**Product Name OP-54** 

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 Supplier

Dymax Asia Pacific Pte Ltd. Block 5008 (East Wing) Dymax Corporation 318 Industrial Lane Dymax Asia Pacific Pte Ltd. Block 5008 (East Wing) 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 Singapore 569874 Tel: +65-6752-2887 Fax: 860-496-0608 Singapore 569874 Tel: +65-6752-2887

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

For further information, please contact

E-mail address Product\_Regulatory\_Europe@dymax.com

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 1 - (H318)
Skin sensitization	Category 1B - (H317)
Specific target organ toxicity (single exposure)	Category 3 - (H335)
Category 3 - Respiratory irritation	·

#### 2.2. Label elements



Signal word - Danger

Contains Isobornyl Acrylate, 2-Hydroxyethyl methacrylate, Acrylic Acid, 3-Methacryloxypropyltrimethoxysilane

#### **Hazard statements**

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

H318 - Causes serious eye damage

H335 - May cause respiratory irritation

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

P264 - Wash face, hands and any exposed skin thoroughly after handling
P305 + P351 + P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to

do. Continue rinsing P310 - Immediately call a POISON CENTER or doctor

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

#### 2.3. Other hazards

No information available

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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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	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)
N,N-Dimethylacrylamide	2680-03-7	220-237-5	01-2119971262-39- 0007	10-24	Acute Tox. 3 (H301) Acute Tox. 3 (H311) Eye Dam. 1 (H318)
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)
N-[3-(Dimethylamino)propy I] methacrylamide	5205-93-6	226-002-3	-	3-<5	Skin Irrit. 2 (H315) Skin Sens. 1B (H317) Eye Dam. 1 (H318)
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-Methacryloxypropyltrimet hoxysilane	2530-85-0	219-785-8	-	1-<3	Skin Sens. 1 (H317)

Chemical name	CAS No	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			
N,N-Dimethylacrylamide	316				
2-Hydroxyethyl methacrylate	5050	3000			
N-[3-(Dimethylamino)propy I] methacrylamide	3334	2355			
Acrylic Acid	193	2000	3.6 2.775		
3-Methacryloxypropyltrimet hoxysilane	23500	2000			

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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 Immediate medical attention is required. Show this safety data sheet to the doctor in

attendance.

Inhalation Remove to fresh air. Get medical attention immediately if symptoms occur. IF exposed or

concerned: Get medical advice/attention.

Eye contact Get immediate medical attention. 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.

**Skin contact** Wash off immediately with soap and plenty of water for at least 15 minutes. May cause an

allergic skin reaction. In the case of skin irritation or allergic reactions see a physician.

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

vomiting. Call a physician.

Self-protection of the first aider 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** Burning sensation. Itching. Rashes. Hives.

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

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

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.

Cilcillical

5.3. Advice for firefightersSpecial protective equipment and Firefighters should wear self-contained breathing apparatus and full firefighting turnout gear.

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**precautions for fire-fighters**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. Use personal protective equipment as required.

Ensure adequate ventilation. 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.

For emergency responders Use personal protection recommended in Section 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. Do not eat, drink or smoke when using this product. Ensure adequate

skin, eyes or clothing. Do not eat, drink or smoke when using this product. Ensure adequat ventilation. In case of insufficient ventilation, wear suitable respiratory equipment. 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 Avoid contact with skin, eyes or clothing. Wear suitable gloves and eye/face protection. Do

not eat, drink or smoke when using this product.

#### 7.2. Conditions for safe storage, including any incompatibilities

Storage Conditions Keep containers tightly closed in a dry, cool and well-ventilated place. Store locked up.

Keep out of the reach of children. 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.

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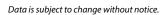
## SECTION 8: Exposure controls/personal protection

8.1. Control parameters

**Exposure Limits** 

Chemical name	European Union	Austria	Belgium	Bulgaria	Croatia
Acrylic Acid	STEL: 59 mg/m <sup>3</sup>	TWA: 10 ppm	TWA: 2 ppm	STEL: 59 mg/m <sup>3</sup>	TWA: 10 ppm
79-10-7	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>
	.,		*	.,	,
Chemical name	Cyprus	Czech Republic	Denmark	Estonia	Finland
Acrylic Acid	STEL: 59 mg/m <sup>3</sup>	TWA: 30 mg/m <sup>3</sup>	TWA: 2 ppm	TWA: 10 ppm	TWA: 2 ppm
79-10-7	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>		H*	STEL: 20 ppm	Ceiling: 15 ppm
	TWA: 10 ppm		STEL: 20 ppm 1 minute	STEL: 59 mg/m <sup>3</sup>	Ceiling: 45 mg/m <sup>3</sup>
			STEL: 59 mg/m <sup>3</sup> 1		
			minute		
Chemical name	France	Germany TRGS	Germany DFG	Greece	Hungary
Isobornyl Acrylate	-	-	skin sensitizer	-	-
5888-33-5					
2-Hydroxyethyl	-	-	skin sensitizer	-	-
methacrylate					
868-77-9					
Acrylic Acid 79-10-7	TWA: 10 ppm	TWA: 10 ppm	TWA: 10 ppm	TWA: 10 ppm	TWA: 29 mg/m <sup>3</sup>
79-10-7	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 STEL: 59 mg/m <sup>3</sup>		Peak: 10 ppm Peak: 30 mg/m <sup>3</sup>	STEL: 20 ppm STEL: 59 mg/m <sup>3</sup>	
Chemical name	Ireland	Italy MDLPS	Italy AIDII	Latvia	Lithuania
2-Hydroxyethyl	-	- Italy WIDEI O	- Italy Albii	- Latvia	Sensitizer
methacrylate					TWA: 20 mg/m <sup>3</sup>
868-77-9					
Acrylic Acid	TWA: 10 ppm	TWA: 29 ppm	TWA: 2 ppm	TWA: 5 mg/m <sup>3</sup>	TWA: 10 ppm
79-10-7	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: 59 mg/m <sup>3</sup>	STEL: 20 mg/m <sup>3</sup>		STEL: 20 ppm	Ceiling: 20 ppm
Chemical name	Luxembourg	pelle* Malta	Netherlands	Norway	Poland
2-Hydroxyethyl	Luxeribourg	iviaita -	- Netherlands	TWA: 2 ppm	i dianu
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	*
01	TWA: 10 ppm	TWA: 29 mg/m <sup>3</sup>	01	STEL: 59 mg/m <sup>3</sup>	0
Chemical name	Portugal	Romania	Slovakia	Slovenia	Spain
Acrylic Acid	TWA: 10 ppm TWA: 29 mg/m <sup>3</sup>	TWA: 10 ppm TWA: 29 mg/m <sup>3</sup>	TWA: 10 ppm TWA: 29 mg/m <sup>3</sup>	TWA: 29 mg/m <sup>3</sup>	TWA: 10 ppm TWA: 29 mg/m <sup>3</sup>
79-10-7	STEL: 59 mg/m <sup>3</sup>	STEL: 20 ppm	Ceiling: 59 mg/m <sup>3</sup>	TWA: 10 ppm STEL: 20 ppm	STEL: 20 ppm
	STEL: 39 mg/ms	STEL: 20 ppill STEL: 59 mg/m <sup>3</sup>	Cenning. 38 mg/m	STEL: 20 ppill STEL: 59 mg/m <sup>3</sup>	STEL: 20 ppm STEL: 59 mg/m <sup>3</sup>
	P*	0.LL. 00 mg/m		* * *	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		

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ppm Bindande KGV: 59 mg/m³	STEL: 59 mg/m³ STEL: 59 mg/	/m³
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#### **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

#### Derived No Effect Level (DNEL) - General Public

#### Predicted No Effect Concentration (PNEC)

No information available.

#### 8.2. Exposure controls

**Engineering controls** No information available.

Personal protective equipment

Eye/face protection Tight sealing safety goggles.

Wear suitable gloves. Nitrile rubber, Butyl rubber. Hand protection

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 Avoid contact with skin, eyes or clothing. Wear suitable gloves and eye/face protection. Do not eat, drink or smoke when using this product

**Environmental exposure controls** No information available.

## **SECTION 9: Physical and chemical properties**

9.1. Information on basic physical and chemical properties
Physical state
Appearance
Liquid
transparent colorless light yellow to Odor Characteristic Odor threshold

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

No information available

Upper flammability or explosive No data available

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None known

Lower flammability or explosive No data available limits

None known **Decomposition temperature** None known No data available pH (as aqueous solution) No data available None known Kinematic viscosity No data available None known Dynamic viscosity 105 cP None known No data available Water solubility None known Solubility(ies) 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

Relative vapor density

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

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.

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### **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 damage.

May cause irreversible damage to eyes.

Skin contact Specific test data for the substance or mixture is not available. May cause sensitization by

skin contact. 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 Redness. Burning. May cause blindness. Itching. Rashes. Hives. 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)
 2,103.10 mg/kg

 ATEmix (dermal)
 3,948.40 mg/kg

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

**Component Information** 

Chemical name	Oral LD50	Dermal LD50	Inhalation LC50
Isobornyl Acrylate	= 4890 mg/kg (Rat)	> 3000 mg/kg ( Rabbit )	-
N,N-Dimethylacrylamide	= 316 mg/kg (Rat)	907mg/kg (Rabbit)	> 776 ppm (Rat) 1 h
2-Hydroxyethyl methacrylate	= 5050 mg/kg ( Rat )	> 3000 mg/kg ( Rabbit )	-
N-[3-(Dimethylamino)propyl] methacrylamide	= 3334 mg/kg ( Rat )	= 2355 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

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

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

irritation.

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

damage.

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**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.

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

Chemical name	Algae/aquatic plants	Fish	Toxicity to	Crustacea
			microorganisms	
Isobornyl Acrylate	ErC 50 = 2.7 mg/L 96h	LC50: =0.704mg/L 96h	-	EC 50 = 1.1 mg/L 48 h
	(Pseudokirchneriella	(Danio rerio)		(Daphnia magna)
	subcapitata)			
N,N-Dimethylacrylamide	-	LC50: >100mg/L 96h	·	EC50 > 120 mg/l 48 h
		(Oncorhynchus mykiss)		(Daphnia magna)
2-Hydroxyethyl	-	LC50: 213 - 242mg/L	=	EC50 > 380 mg/l 48 h
methacrylate		(96h, Pimephales		(Daphnia magna)
		promelas)		
		LC50: =227mg/L (96h,		
		Pimephales promelas)		
N-[3-(Dimethylamino)pro	-	LC50: =290mg/L (96h,	·	-
pyl] methacrylamide		Oncorhynchus mykiss)		
Acrylic Acid	EC50: =0.04mg/L	LC50: =222mg/L (96h,	-	EC50:=95mg/L (48h,
	(72h, Desmodesmus	Brachydanio rerio) NOEC:		Daphnia magna)
	subspicatus)	>= 10.1mg/L (45d,		NOEC: =3.8mg/L (21d,
	EC50: =0.17mg/L	Oryzias latipes, OECD		Daphnia magna)
	(96h, Pseudokirchneriella	210)		
	subcapitata)			
3-Methacryloxypropyltrim	EC50 > 536,00 mg/l 72 h		-	EC50 > 876,00 mg/l 48 h
ethoxysilane	(Scenedesmus	(96h Danio rerio)		(Daphnia magna)
	subspicatus)			

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## **Manufacturer:**

Dymax®

## **Product Name:**

Dymax OP-54 UV Optical Adhesive (3ml)

# **Manufacturer Part Number:**

OP-54-3ML

Click here for more details on the Dymax OP-54 UV Optical Adhesive (3ml)

**OP-54 - OP-54 Revision date** 27-Apr-2023

12.2. Persistence and degradability

Persistence and degradability No information available.

12.3. Bioaccumulative potential

Bioaccumulation

**Component Information** 

- compensation	
Chemical name	Partition coefficient
Isobornyl Acrylate	4.52
N,N-Dimethylacrylamide	-0.3
2-Hydroxyethyl methacrylate	0.42
N-[3-(Dimethylamino)propyl] methacrylamide	0.5
Acrylic Acid	0.46
3-Methacryloxypropyltrimethoxysilane	2.1

#### 12.4. Mobility in soil

Mobility in soil No information available.

12.5. Results of PBT and vPvB assessment

threshold of declaration.

Chemical name	PBT and vPvB assessment
Isobornyl Acrylate	The substance is not PBT / vPvB
N,N-Dimethylacrylamide	The substance is not PBT / vPvB
2-Hydroxyethyl methacrylate	The substance is not PBT / vPvB
N-[3-(Dimethylamino)propyl] methacrylamide	The substance is not PBT / vPvB
Acrylic Acid	The substance is not PBT / vPvB
3-Methacryloxypropyltrimethoxysilane	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 waste in accordance with environmental legislation. Dispose of in accordance

with local regulations.

Contaminated packaging Do not reuse empty containers

### SECTION 14: Transport information

IATA

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

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

<u>ADR</u>

14.1 UN number or ID number
14.2 Extended Proper Shipping
Name
14.3 Transport hazard class(es)
14.4 Packing group
14.5 Environmental hazards
14.6 Special precautions for user
Special Provisions

Not regulated
Not regulated
Not applicable

14.6 Special precautions for user Special Provisions

### 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) slightly hazardous to water (WGK 1) 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.

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#### 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.	-

#### Persistent Organic Pollutants

Not applicable

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

Not applicable

International Inventories

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

Legend:
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

No information available **Chemical Safety Report** 

#### **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

H301 - Toxic if swallowed 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

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H318 - Causes serious eye damage

H319 - Causes serious eye irritation

H332 - Harmful if inhaled

H335 - May cause respiratory irritation

H400 - Very toxic to aquatic life

H410 - Very toxic to aquatic life with long lasting effects

**Legend** 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) STEL

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

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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

Revision date

27-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** 

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