

SAFETY DATA SHEET (SDS)

**Manufacturer:**

Dymax

Product Name:

Dymax OP-56 Optical Adhesive, Fiber Optic Assembly, Transparent, UV Cure - 3ml Syringe

Manufacturer Part Number:

OP-56-3ML

▶ Click here for more details on the Dymax OP-56 Optical Adhesive, Fiber Optic Assembly, Transparent, UV Cure - 3ml Syringe

SAFETY DATA SHEET

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-56

Issuing Date 27-Apr-2023

Revision date 27-Apr-2023

Revision Number 32

SECTION 1: Identification of the substance/mixture and of the company/undertaking**1.1. Product identifier****Product Name** OP-56**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**Dymax Corporation
318 Industrial Lane
Torrington, CT 06790
Tel: 860-482-1010
Fax: 860-496-0608**Manufacturing sites**Dymax Asia Pacific Pte Ltd.
Block 5008 (East Wing)
Ang Mo Kio Ave. 5
#05-3 TECHplace II
Singapore 569874
Tel: +65-6752-2887
Fax: +65-6752-2813**Supplier**Dymax Asia Pacific Pte Ltd.
Block 5008 (East Wing)
Ang Mo Kio Ave. 5
#05-3 TECHplace II
Singapore 569874
Tel: +65-6752-2887
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

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

23 Centre Street • New Bedford, MA 02740 USA • focenter.com

508-992-6464 | (800) 473-4237 • sales@focenter.com



SAFETY DATA SHEET (SDS)

**Manufacturer:**

Dymax

Product Name:

Dymax OP-56 Optical Adhesive, Fiber Optic Assembly, Transparent, UV Cure - 3ml Syringe

Manufacturer Part Number:

OP-56-3ML

▶ Click here for more details on the Dymax OP-56 Optical Adhesive, Fiber Optic Assembly, Transparent, UV Cure - 3ml Syringe

OP-56 - OP-56

Revision date 27-Apr-2023

2.1. Classification of the substance or mixture

Regulation (EC) No 1272/2008

Acute toxicity - Inhalation (Dusts/Mists)	Category 4 - (H332)
Serious eye damage/eye irritation	Category 1 - (H318)
Skin sensitization	Category 1A - (H317)
Carcinogenicity	Category 2 - (H351)
Specific target organ toxicity (single exposure)	Category 3 - (H335)
Category 3 - Respiratory irritation	
Specific target organ toxicity (repeated exposure)	Category 2 - (H373)
Chronic aquatic toxicity	Category 3 - (H412)

2.2. Label elements

Signal word - Danger

Contains 1-vinyl-2-pyrrolidone, 4,4'-(1-Methylethylidene) bisphenol polymer with (chloromethyl)oxirane, 2-propenoate, Bisphenol-A epoxy resin, Tripropylene Glycol Diacrylate Esters

Hazard statements

H317 - May cause an allergic skin reaction
H318 - Causes serious eye damage
H332 - Harmful if inhaled
H335 - May cause respiratory irritation
H351 - Suspected of causing cancer
H373 - May cause damage to organs through prolonged or repeated exposure
H412 - Harmful to aquatic life with long lasting effects

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

P260 - Do not breathe dust/fume/gas/mist/vapors/spray
P280 - Wear protective gloves/protective clothing/eye protection/face protection. 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
P362 + P364 - Take off contaminated clothing and wash it before reuse

Additional information

This product requires tactile warnings if supplied to the general public.

2.3. Other hazards

Causes mild skin irritation.

Product Information

Environmental product testing for acute and chronic aquatic effects determined classification to be Category 3. 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

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

23 Centre Street • New Bedford, MA 02740 USA • focenter.com

508-992-6464 | (800) 473-4237 • sales@focenter.com



SAFETY DATA SHEET (SDS)



Manufacturer:

Dymax

Product Name:

Dymax OP-56 Optical Adhesive, Fiber Optic Assembly, Transparent, UV Cure - 3ml Syringe

Manufacturer Part Number:

OP-56-3ML

Click here for more details on the Dymax OP-56 Optical Adhesive, Fiber Optic Assembly, Transparent, UV Cure - 3ml Syringe

OP-56 - OP-56

Revision date 27-Apr-2023

SECTION 3: Composition/information on ingredients

3.1 Substances

Not applicable

3.2 Mixtures

Chemical name	CAS No	EC No (EU Index No)	REACH registration number	Weight-%	Classification according to Regulation (EC) No. 1272/2008 [CLP]
1-vinyl-2-pyrrolidone	88-12-0	(613-168-00-0) 201-800-4	-	25-39	Acute Tox. 4 (H302) Acute Tox. 4 (H312) Acute Tox. 4 (H332) Eye Dam. 1 (H318) Carc. 2 (H351) STOT SE 3 (H335) STOT RE 2 (H373)
4,4"-(1-Methylethylidene) bisphenol polymer with (chloromethyl)oxirane, 2-propenoate	55818-57-0	-	-	10-24	Skin Sens. 1 (H317) Aquatic Chronic 2 (H411)
Polyethylene Glycol 600 Diacrylate	26570-48-9	-	-	5-9	Skin Sens. 1A (H317) Eye Dam. 1 (H318)
Bisphenol-A epoxy resin	25068-38-6	(603-074-00-8)	-	3-<5	Skin Irrit. 2 (H315) Eye Irrit. 2 (H319) Skin Sens. 1 (H317) Aquatic Chronic 2 (H411)
Tripropylene Glycol Diacrylate Esters	42978-66-5	(607-249-00-X) 256-032-2	-	3-<5	Skin Irrit. 2 (H315) Eye Irrit. 2 (H319) Skin Sens. 1 (H317) STOT SE 3 (H335) Aquatic Chronic 2 (H411)
Benzene, (1-methylethenyl)-, homopolymer, ar-(2-hydroxy-2-methyl-1-oxopropyl) derivs.	163702-01-0	402-990-3	-	1-<3	Repr. 2 (H361f)
1,4-Benzenediol	123-31-9	(604-005-00-4) 204-617-8	-	<0.1	Acute Tox. 4 (H302) Eye Dam. 1 (H318) Skin Sens. 1 (H317) Muta. 2 (H341) Carc. 2 (H351) Aquatic Acute 1 (H400)

Chemical name	CAS No	Specific concentration limit (SCL)	M-Factor	M-Factor (long-term)
Bisphenol-A epoxy resin	25068-38-6	Eye Irrit. 2 :: C>=5% Skin Irrit. 2 :: C>=5%		
Tripropylene Glycol Diacrylate Esters	42978-66-5	STOT SE 3 :: C>=10%		

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

23 Centre Street • New Bedford, MA 02740 USA • focenter.com

508-992-6464 | (800) 473-4237 • sales@focenter.com



SAFETY DATA SHEET (SDS)

**Manufacturer:**

Dymax

Product Name:

Dymax OP-56 Optical Adhesive, Fiber Optic Assembly, Transparent, UV Cure - 3ml Syringe

Manufacturer Part Number:

OP-56-3ML

▶ Click here for more details on the Dymax OP-56 Optical Adhesive, Fiber Optic Assembly, Transparent, UV Cure - 3ml Syringe

OP-56 - OP-56

Revision date 27-Apr-2023

Chemical name	CAS No	Specific concentration limit (SCL)	M-Factor	M-Factor (long-term)
1,4-Benzenediol	123-31-9		10	

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 - dust/mist - mg/L	Inhalation LC50 - 4 hour - vapor - mg/L	Inhalation LC50 - 4 hour - gas - ppm
1-vinyl-2-pyrrolidone	830	560			
Bisphenol-A epoxy resin	11400				
Tripropylene Glycol Diacrylate Esters	6200	2000			
Benzene, (1-methylethenyl)-, homopolymer, ar-(2-hydroxy-2-methyl-1-oxopropyl) derivs.		2000			
1,4-Benzenediol	298	74800			

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

This product does not contain candidate substances of very high concern at a concentration $\geq 0.1\%$ (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. IF exposed or concerned: Get medical advice/attention.
Inhalation	Remove to fresh air. Get medical attention immediately if symptoms occur. IF exposed or concerned: Get medical advice/attention. If symptoms persist, call a physician. If breathing has stopped, give artificial respiration. Get medical attention immediately.
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. Get medical attention.
Self-protection of the first aider	Avoid contact with skin, eyes or clothing. Ensure that medical personnel are aware of the material(s) involved, take precautions to protect themselves and prevent spread of contamination. Avoid breathing vapors or mists. Use personal protective equipment as required. See section 8 for more information.

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

23 Centre Street • New Bedford, MA 02740 USA • focenter.com

508-992-6464 | (800) 473-4237 • sales@focenter.com



**Manufacturer:**

Dymax

Product Name:

Dymax OP-56 Optical Adhesive, Fiber Optic Assembly, Transparent, UV Cure - 3ml Syringe

Manufacturer Part Number:

OP-56-3ML

▶ Click here for more details on the Dymax OP-56 Optical Adhesive, Fiber Optic Assembly, Transparent, UV Cure - 3ml Syringe

OP-56 - OP-56

Revision date 27-Apr-2023

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

Burning sensation. Itching. Rashes. Hives. Prolonged contact may cause redness and irritation. Coughing and/ or wheezing. Difficulty in breathing.

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 chemical**

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. Use personal protective equipment as required. Ensure adequate ventilation. Evacuate personnel to safe areas. Keep people away from and upwind of spill/leak. Avoid breathing vapors or mists.

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.

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

23 Centre Street • New Bedford, MA 02740 USA • focenter.com

508-992-6464 | (800) 473-4237 • sales@focenter.com



SAFETY DATA SHEET (SDS)

**Manufacturer:**

Dymax

Product Name:

Dymax OP-56 Optical Adhesive, Fiber Optic Assembly, Transparent, UV Cure - 3ml Syringe

Manufacturer Part Number:

OP-56-3ML

▶ Click here for more details on the Dymax OP-56 Optical Adhesive, Fiber Optic Assembly, Transparent, UV Cure - 3ml Syringe

OP-56 - OP-56

Revision date 27-Apr-2023

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 ventilation. In case of insufficient ventilation, wear suitable respiratory equipment. Take off contaminated clothing and wash before reuse. Remove contaminated clothing and shoes. 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. Wash hands before breaks and immediately after handling the 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.**SECTION 8: Exposure controls/personal protection****8.1. Control parameters****Exposure Limits**

Chemical name	European Union	Austria	Belgium	Bulgaria	Croatia
1-vinyl-2-pyrrolidone 88-12-0	-	H*	TWA: 0.05 ppm TWA: 0.23 mg/m ³	-	-
Bisphenol-A epoxy resin 25068-38-6	-	-	-	TWA: 1.0 mg/m ³	-
1,4-Benzenediol 123-31-9	-	TWA: 2 mg/m ³ STEL 4 mg/m ³ Sensitizer	TWA: 1 mg/m ³	TWA: 2.0 mg/m ³	TWA: 0.5 mg/m ³ Skin Sensitisation
Chemical name	Cyprus	Czech Republic	Denmark	Estonia	Finland
1-vinyl-2-pyrrolidone 88-12-0	-	-	-	-	TWA: 0.1 ppm TWA: 0.5 mg/m ³
1,4-Benzenediol 123-31-9	-	TWA: 2 mg/m ³ Ceiling: 4 mg/m ³ Sensitizer	Ceiling: 2 mg/m ³	TWA: 0.5 mg/m ³ STEL: 1.5 mg/m ³	TWA: 0.5 mg/m ³ STEL: 2 mg/m ³
Chemical name	France	Germany TRGS	Germany DFG	Greece	Hungary
1-vinyl-2-pyrrolidone 88-12-0	TWA: 0.1 ppm	TWA: 0.005 ppm TWA: 0.025 mg/m ³ H*	TWA: 0.01 ppm TWA: 0.047 mg/m ³ Peak: 0.02 ppm Peak: 0.094 mg/m ³ *	-	-

Contact the professionals at Fiber Optic Center for a quote or to get more details.23 Centre Street • New Bedford, MA 02740 USA • focenter.com508-992-6464 | (800) 473-4237 • sales@focenter.com

SAFETY DATA SHEET (SDS)



Manufacturer:

Dymax

Product Name:

Dymax OP-56 Optical Adhesive, Fiber Optic Assembly, Transparent, UV Cure - 3ml Syringe

Manufacturer Part Number:

OP-56-3ML

▶ Click here for more details on the Dymax OP-56 Optical Adhesive, Fiber Optic Assembly, Transparent, UV Cure - 3ml Syringe

OP-56 - OP-56

Revision date 27-Apr-2023

Tripropylene Glycol Diacrylate Esters 42978-66-5	-	-	skin sensitizer	-	-
1,4-Benzenediol 123-31-9	TWA: 2 mg/m ³	-	*	TWA: 2 mg/m ³ STEL: 4 mg/m ³	-
Chemical name	Ireland	Italy MDLPS	Italy AIDII	Latvia	Lithuania
1-vinyl-2-pyrrolidone 88-12-0	TWA: 0.05 ppm STEL: 0.15 ppm	-	TWA: 0.05 ppm TWA: 0.23 mg/m ³	TWA: 1 mg/m ³	-
1,4-Benzenediol 123-31-9	TWA: 0.5 mg/m ³ STEL: 1.5 mg/m ³ Sensitizer	-	TWA: 1 mg/m ³	-	Sensitizer TWA: 0.5 mg/m ³ STEL: 1.5 mg/m ³
Chemical name	Luxembourg	Malta	Netherlands	Norway	Poland
1,4-Benzenediol 123-31-9	-	-	-	TWA: 0.5 mg/m ³ STEL: 1.5 mg/m ³	STEL: 2 mg/m ³ TWA: 1 mg/m ³
Chemical name	Portugal	Romania	Slovakia	Slovenia	Spain
1-vinyl-2-pyrrolidone 88-12-0	TWA: 0.05 ppm	-	-	TWA: 0.05 mg/m ³ TWA: 0.01 ppm STEL: 0.02 ppm STEL: 0.1 mg/m ³ *	-
1,4-Benzenediol 123-31-9	TWA: 1 mg/m ³ Sensitizer dermal	TWA: 1 mg/m ³ STEL: 2 mg/m ³	TWA: 2 mg/m ³ *	-	TWA: 2 mg/m ³ sensitizer
Chemical name	Sweden	Switzerland	United Kingdom		
1-vinyl-2-pyrrolidone 88-12-0	-	TWA: 0.02 ppm TWA: 0.09 mg/m ³ STEL: 0.04 ppm STEL: 0.18 mg/m ³ H*	-		
1,4-Benzenediol 123-31-9	NGV: 0.5 mg/m ³ Vägledande KGV: 1.5 mg/m ³ Sensitizer	TWA: 2 mg/m ³ STEL: 2 mg/m ³ H*	TWA: 0.5 mg/m ³ STEL: 1.5 mg/m ³		

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 protection

Tight sealing safety goggles.

Hand protection

Wear suitable gloves. Nitrile rubber, Butyl rubber.

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

23 Centre Street • New Bedford, MA 02740 USA • focenter.com

508-992-6464 | (800) 473-4237 • sales@focenter.com



SAFETY DATA SHEET (SDS)

**Manufacturer:**

Dymax

Product Name:

Dymax OP-56 Optical Adhesive, Fiber Optic Assembly, Transparent, UV Cure - 3ml Syringe

Manufacturer Part Number:

OP-56-3ML

▶ Click here for more details on the Dymax OP-56 Optical Adhesive, Fiber Optic Assembly, Transparent, UV Cure - 3ml Syringe

OP-56 - OP-56

Revision date 27-Apr-2023

Skin and body protection	Wear suitable protective 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. Wash hands before breaks and immediately after handling the product.
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
Odor	Characteristic.
Odor threshold	No information available

Property	Values	Remarks • Method
Melting point / freezing point	No data available	None known
Boiling point / boiling range	No data available	None known
Flammability (solid, gas)	No data available	None known
Flammability Limit in Air		None known
Upper flammability or explosive limits	No data available	
Lower flammability or explosive limits	No data available	
Flash point	101 °C	Pensky-Martens Closed Cup (PMCC)
Autoignition temperature	240 °C	None known
Decomposition temperature		None known
pH	No data available	None known
pH (as aqueous solution)	No data available	None known
Kinematic viscosity	No data available	None known
Dynamic viscosity	1,800 cP	
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	None known
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

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

23 Centre Street • New Bedford, MA 02740 USA • focenter.com

508-992-6464 | (800) 473-4237 • sales@focenter.com



SAFETY DATA SHEET (SDS)

**Manufacturer:**

Dymax

Product Name:

Dymax OP-56 Optical Adhesive, Fiber Optic Assembly, Transparent, UV Cure - 3ml Syringe

Manufacturer Part Number:

OP-56-3ML

▶ Click here for more details on the Dymax OP-56 Optical Adhesive, Fiber Optic Assembly, Transparent, UV Cure - 3ml Syringe

OP-56 - OP-56

Revision date 27-Apr-2023

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 Excessive heat.

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. Harmful by inhalation. (based on components).

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 irritation. May cause sensitization by skin contact. Repeated or prolonged skin contact may cause allergic reactions with susceptible persons. (based on components). Causes mild 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. Prolonged contact may cause redness and irritation. Coughing and/ or wheezing.

Acute toxicity

Numerical measures of toxicity

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

23 Centre Street • New Bedford, MA 02740 USA • focenter.com

508-992-6464 | (800) 473-4237 • sales@focenter.com



SAFETY DATA SHEET (SDS)

**Manufacturer:**

Dymax

Product Name:

Dymax OP-56 Optical Adhesive, Fiber Optic Assembly, Transparent, UV Cure - 3ml Syringe

Manufacturer Part Number:

OP-56-3ML

▶ Click here for more details on the Dymax OP-56 Optical Adhesive, Fiber Optic Assembly, Transparent, UV Cure - 3ml Syringe

OP-56 - OP-56

Revision date 27-Apr-2023

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

ATEmix (oral) 2,248.50 mg/kg
ATEmix (dermal) 2,874.80 mg/kg
ATEmix (inhalation-dust/mist) 4.15 mg/l

Component Information

Chemical name	Oral LD50	Dermal LD50	Inhalation LC50
1-vinyl-2-pyrrolidone	= 830 mg/kg (Rat)	= 560 mg/kg (Rabbit)	= 3070 mg/m ³ (Rat) 4 h
Bisphenol-A epoxy resin	= 11400 mg/kg (Rat)	-	-
Tripropylene Glycol Diacrylate Esters	= 6200 mg/kg (Rat)	> 2 g/kg (Rabbit)	-
Benzene, (1-methylethenyl)-, homopolymer, ar-(2-hydroxy-2-methyl-1-oxopropyl) derivs.	-	= 2000 mg/kg (Rat)	-
1,4-Benzenediol	= 298 mg/kg (Rat)	= 74800 mg/kg (Rabbit)	-

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 mild skin irritation.

Serious eye damage/eye irritation

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

Respiratory or skin sensitization

May cause an allergic skin reaction.

Germ cell mutagenicity

No information available.

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

Chemical name	European Union
1,4-Benzenediol	Muta. 2

Carcinogenicity

Contains a known or suspected carcinogen. Classification based on data available for ingredients. Suspected of causing cancer.

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

Chemical name	European Union
1-vinyl-2-pyrrolidone	Carc. 2
1,4-Benzenediol	Carc. 2

Reproductive toxicity

Contains a known or suspected reproductive toxin. Classification based on data available for ingredients.

STOT - single exposure

May cause respiratory irritation.

STOT - repeated exposure

May cause damage to organs through prolonged or repeated exposure.

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

23 Centre Street • New Bedford, MA 02740 USA • focenter.com

508-992-6464 | (800) 473-4237 • sales@focenter.com



SAFETY DATA SHEET (SDS)

**Manufacturer:**

Dymax

Product Name:

Dymax OP-56 Optical Adhesive, Fiber Optic Assembly, Transparent, UV Cure - 3ml Syringe

Manufacturer Part Number:

OP-56-3ML

► Click here for more details on the Dymax OP-56 Optical Adhesive, Fiber Optic Assembly, Transparent, UV Cure - 3ml Syringe

OP-56 - OP-56

Revision date 27-Apr-2023

Aspiration hazard No information available.

11.2. Information on other hazards

11.2.1. Endocrine disrupting properties
Endocrine disrupting properties

11.2.2. Other information

Other adverse effects No information available.

SECTION 12: Ecological information**12.1. Toxicity**

Ecotoxicity Harmful to aquatic life with long lasting effects.

Chemical name	Algae/aquatic plants	Fish	Toxicity to microorganisms	Crustacea
1-vinyl-2-pyrrolidone	EC50: =780mg/L (72h, <i>Desmodesmus subspicatus</i>)	LC50 976 mg/L 96 h (<i>Oncorhynchus mykiss</i>)	-	EC50: =45mg/L (48h, <i>Daphnia</i> species)
Tripropylene Glycol Diacrylate Esters	EC50: >28mg/L (72h, <i>Desmodesmus subspicatus</i>)	-	-	EC50: =88.7mg/L (48h, <i>Daphnia magna</i>)
1,4-Benzenediol	EC50: =0.335mg/L (72h, <i>Pseudokirchneriella subcapitata</i>)	LC50: =0.044mg/L (96h, <i>Oncorhynchus mykiss</i>) LC50: =0.044mg/L (96h, <i>Pimephales promelas</i>) LC50: 0.1 - 0.18mg/L (96h, <i>Pimephales promelas</i>) LC50: =0.17mg/L (96h, <i>Brachydanio rerio</i>)	-	EC50: =0.29mg/L (48h, <i>Daphnia magna</i>)

12.2. Persistence and degradability

Persistence and degradability No information available.

12.3. Bioaccumulative potential

Bioaccumulation

Component Information

Chemical name	Partition coefficient
1-vinyl-2-pyrrolidone	0.4
4,4'-(1-Methylethylidene) bisphenol polymer with (chloromethyl)oxirane, 2-propenoate	3.8
Tripropylene Glycol Diacrylate Esters	2
Benzene, (1-methylethenyl)-, homopolymer, ar-(2-hydroxy-2-methyl-1-oxopropyl) derivs.	4.53
1,4-Benzenediol	0.59

12.4. Mobility in soil

Mobility in soil No information available.

12.5. Results of PBT and vPvB assessment

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

23 Centre Street • New Bedford, MA 02740 USA • focenter.com

508-992-6464 | (800) 473-4237 • sales@focenter.com



SAFETY DATA SHEET (SDS)

**Manufacturer:**

Dymax

Product Name:

Dymax OP-56 Optical Adhesive, Fiber Optic Assembly, Transparent, UV Cure - 3ml Syringe

Manufacturer Part Number:

OP-56-3ML

▶ Click here for more details on the Dymax OP-56 Optical Adhesive, Fiber Optic Assembly, Transparent, UV Cure - 3ml Syringe

OP-56 - OP-56

Revision date 27-Apr-2023

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
1-vinyl-2-pyrrolidone	The substance is not PBT / vPvB
4,4"-(1-Methylethylidene) bisphenol polymer with (chloromethyl)oxirane, 2-propenoate	The substance is not PBT / vPvB
Bisphenol-A epoxy resin	The substance is not PBT / vPvB
Tripropylene Glycol Diacrylate Esters	The substance is not PBT / vPvB
Benzene, (1-methylethenyl)-, homopolymer, ar-(2-hydroxy-2-methyl-1-oxopropyl) derivs.	The substance is not PBT / vPvB
1,4-Benzenediol	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 Not regulated
14.2 Extended Proper Shipping Name Not regulated
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 Not regulated
14.2 Extended Proper Shipping Name Not regulated
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
14.7 Maritime transport in bulk according to IMO instruments No information available

RID

14.1 UN number or ID number Not regulated

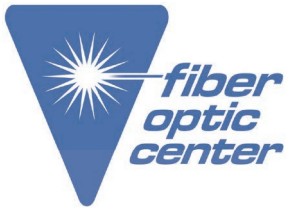
Contact the professionals at Fiber Optic Center for a quote or to get more details.

23 Centre Street • New Bedford, MA 02740 USA • focenter.com

508-992-6464 | (800) 473-4237 • sales@focenter.com



SAFETY DATA SHEET (SDS)

**Manufacturer:**

Dymax

Product Name:

Dymax OP-56 Optical Adhesive, Fiber Optic Assembly, Transparent, UV Cure - 3ml Syringe

Manufacturer Part Number:

OP-56-3ML

▶ Click here for more details on the Dymax OP-56 Optical Adhesive, Fiber Optic Assembly, Transparent, UV Cure - 3ml Syringe

OP-56 - OP-56

Revision date 27-Apr-2023

14.2 Extended Proper Shipping Name Not regulated
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

ADR

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

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
1-vinyl-2-pyrrolidone - 88-12-0	RG 84
1,4-Benzenediol - 123-31-9	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.

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
1-vinyl-2-pyrrolidone - 88-12-0	75.	-
Bisphenol-A epoxy resin - 25068-38-6	75.	-
Tripropylene Glycol Diacrylate Esters - 42978-66-5	75.	-
1,4-Benzenediol - 123-31-9	75.	-

Persistent Organic Pollutants

Not applicable

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

Not applicable

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

23 Centre Street • New Bedford, MA 02740 USA • focenter.com

508-992-6464 | (800) 473-4237 • sales@focenter.com



SAFETY DATA SHEET (SDS)

**Manufacturer:**

Dymax

Product Name:

Dymax OP-56 Optical Adhesive, Fiber Optic Assembly, Transparent, UV Cure - 3ml Syringe

Manufacturer Part Number:

OP-56-3ML



Click here for more details on the Dymax OP-56 Optical Adhesive, Fiber Optic Assembly, Transparent, UV Cure - 3ml Syringe

OP-56 - OP-56

Revision date 27-Apr-2023

International Inventories

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

H302 - Harmful if swallowed
H312 - Harmful in contact with skin
H315 - Causes skin irritation
H317 - May cause an allergic skin reaction
H318 - Causes serious eye damage
H319 - Causes serious eye irritation
H332 - Harmful if inhaled
H335 - May cause respiratory irritation
H341 - Suspected of causing genetic defects
H351 - Suspected of causing cancer
H361f - Suspected of damaging fertility
H373 - May cause damage to organs through prolonged or repeated exposure
H400 - Very toxic to aquatic life
H411 - 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	TWA (time-weighted average)	STEL	STEL (Short Term Exposure Limit)
Ceiling	Maximum limit value	*	Skin designation
+	Sensitizers		

Classification procedure

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

23 Centre Street • New Bedford, MA 02740 USA • focenter.com

508-992-6464 | (800) 473-4237 • sales@focenter.com



SAFETY DATA SHEET (SDS)

**Manufacturer:**

Dymax

Product Name:

Dymax OP-56 Optical Adhesive, Fiber Optic Assembly, Transparent, UV Cure - 3ml Syringe

Manufacturer Part Number:

OP-56-3ML

▶ Click here for more details on the Dymax OP-56 Optical Adhesive, Fiber Optic Assembly, Transparent, UV Cure - 3ml Syringe

OP-56 - OP-56

Revision date 27-Apr-2023

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) (AEGLS)
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

Revision date

27-Apr-2023

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 date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal, and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

End of Safety Data Sheet

Contact the professionals at Fiber Optic Center for a quote or to get more details.23 Centre Street • New Bedford, MA 02740 USA • focenter.com508-992-6464 | (800) 473-4237 • sales@focenter.com