

Material Safety Data Sheet

according to ISO/DIR 11014

SDS # : 3094

3094

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Version 4

1. PRODUCT AND COMPANY IDENTIFICATION

Product Name 3094**Identified uses** Adhesives

Manufacturer Dymax Corporation
318 Industrial Lane
Torrington, CT 06790
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Information department: North American Safety Department @ 1-860-482-1010
European Safety Department @ +49-(0) 611-962-7900

Emergency telephone number North America: Chemtrec @ 1-800-424-9300 (24hrs) /
International: Chemtrec @ 001-703-527-3887 (24hrs)

2. HAZARDS IDENTIFICATION

Warning!

Emergency Overview

Harmful by inhalation, Irritating to respiratory system, May cause skin irritation and/or dermatitis, Severe eye irritation,
Vapors may be irritating to eyes, nose, throat, and lungs.

Appearance transparent**Physical state** liquid**Odor** Characteristic

Principle Routes of Exposure

Inhalation, Skin contact, Eye contact, Ingestion.

Product Description

EYES

Avoid contact with eyes, Risk of serious damage to eyes, Contact with eyes may cause irritation.

Skin

Irritating to skin, May cause inflammation, Avoid contact with skin.

Inhalation

Irritating to respiratory system, Harmful by inhalation, May cause irritation of respiratory tract.

Ingestion

Harmful if swallowed, Ingestion may cause irritation to mucous membranes.

Chronic Effects

Avoid repeated exposure.

Environmental hazard

See Section 12 for additional Ecological Information, Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

3. COMPOSITION/INFORMATION ON INGREDIENTS

The ingredients listed in this section have been determined to be hazardous and above threshold limits

Hazardous

Chemical Name	CAS-No	Weight %
N,N-Dimethylacrylamide	2680-03-7	10 - 30
Isobornyl Acrylate	5888-33-5	10 - 30
Monomer	Proprietary	10 - 30
Ethylcellulose	Proprietary	1 - 5
Photoinitiator	Proprietary	1 - 5
Caprolactam	105-60-2	0.1 - 1

4. FIRST AID MEASURES

General advice

IN CASE OF SERIOUS OR PERSISTENT CONDITIONS, CALL A DOCTOR OR EMERGENCY MEDICAL CARE.

Skin contact

Wash off immediately with soap and plenty of water, Get medical attention if irritation develops and persists.

Eye contact

Flush eyes with water at least 15 minutes, get medical attention if eye irritation develops or persists.

Inhalation

Move to fresh air, If symptoms persist, call a physician.

Ingestion

Rinse mouth.

Protection of First-aiders

Ensure that medical personnel are aware of the material(s) involved, take precautions to protect themselves and prevent spread of contamination.

Notes to physician

Treat symptomatically

5. FIRE-FIGHTING MEASURES

Suitable Extinguishing Media

Use CO2, dry chemical, or foam.

Flammable Properties

Not flammable.

Unsuitable Extinguishing Media

Do not use a solid water stream as it may scatter and spread fire.

Hazardous Combustion Products

Hazardous decomposition products due to incomplete combustion.

Specific hazards arising from the chemical

Carbon dioxide (CO2), carbon monoxide (CO), oxides of nitrogen (NOx), dense black smoke.

Protective Equipment and Precautions for Firefighters

Wear self-contained breathing apparatus and protective suit.

NFPA
HMIS

Health Hazard 2
Health Hazard 2

Flammability 1
Flammability 1

Stability 1
Stability 1

6. ACCIDENTAL RELEASE MEASURES

Personal precautions

Ensure adequate ventilation. Wear protective gloves/clothing and eye/face protection.

Environmental precautions

Do not allow material to contaminate ground water system. Local authorities should be advised if significant spillages cannot be contained. Try to prevent the material from entering drains or water courses.

Methods for cleaning up

Soak up with inert absorbent material (e.g. sand, silica gel, acid binder, universal binder, sawdust)

Methods for Containment

Prevent further leakage or spillage if safe to do so.

Other information

See Section 12 for additional Ecological information.

7. HANDLING AND STORAGE

Advice on safe handling

Handle in accordance with good industrial hygiene and safety practice, Ensure adequate ventilation, Protect from light

Technical measures/Storage conditions

Keep container tightly closed in a dry and well-ventilated place, Protect from light, Store at room temperature in the original container

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters

Exposure Guidelines

Chemical Name	ACGIH TLV	OSHA PEL	NIOSH IDLH
Caprolactam	TWA: 5 mg/m ³	(vacated) TWA: 1 mg/m ³ (vacated) TWA: 5 ppm (vacated) TWA: 20 mg/m ³ (vacated) STEL: 3 mg/m ³ (vacated) STEL: 10 ppm (vacated) STEL: 40 mg/m ³	TWA: 1 mg/m ³ TWA: 0.22 ppm STEL: 3 mg/m ³ STEL: 0.66 ppm

Legend

ACGIH: (American Conference of Governmental Industrial Hygienists)

TLV - Threshold Limit Value

OSHA: (Occupational Safety & Health Administration)

PEL - Permissible Exposure Limits

NIOSH IDLH:

Immediately Dangerous to Life or Health

Appropriate engineering controls

Engineering Measures

Where reasonably practicable this should be achieved by the use of local exhaust ventilation and good general extraction.

Individual protection measures, such as personal protective equipment

Personal Protective Equipment**Respiratory protection**

No protective equipment is needed under normal use conditions. If exposure limits are exceeded or irritation is experienced, ventilation and/or protective equipment may be required.

Hand Protection

Nitrile rubber, Please observe the instructions regarding permeability and breakthrough time which are provided by the supplier of the gloves. Also take into consideration the specific local conditions under which the product is used, such as the danger of cuts, abrasion.

Eye/Face Protection

Safety glasses with side-shields, If splashes are likely to occur, wear:, Goggles.

Skin and body protection

Wear suitable protective clothing.

Hygiene measures

Do not eat, drink or smoke when using this product.

General Information

Use personal protective equipment in good condition.

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical state	liquid	Color	light yellow
Appearance	transparent	Odor	Characteristic
pH	No information available	Odor Threshold	No information available
Vapor density	Not applicable	Boiling point	No information available
Vapor Pressure	Not applicable	Freezing Point	No information available
Evaporation rate	Not applicable	Specific Gravity	Not applicable
Flash point	101 °C / 214 °F	Viscosity	1,000 cP

10. STABILITY AND REACTIVITY**Stability**

Stable under normal conditions.

Incompatible products

Amines, Strong oxidizing agents, Strong acids, Strong bases, Oxygen scavengers, Thiosulfates.

Conditions to Avoid

Protect from light, Heat, flames and sparks.

Hazardous Decomposition Products

No decomposition if stored and applied as directed.

Hazardous Polymerization

None under normal processing.

11. TOXICOLOGICAL INFORMATIONAcute toxicity

Chemical Name	LD50 Oral	LD50 Dermal	LC50 Inhalation
N,N-Dimethylacrylamide	= 316 mg/kg (Rat)	= 540 µL/kg (Rabbit)	776 mg/l (Rat) 1 h
Isobornyl Acrylate	= 4890 mg/kg (Rat)	> 5 g/kg (Rabbit)	
Ethylcellulose	> 5 g/kg (Rat)	> 5 g/kg (Rabbit)	

Caprolactam	= 1155 mg/kg (Rat)	1410 µL/kg (Rabbit) 2000 mg/kg (Rat)	= 8.16 mg/L (Rat) 4 h
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Potential Health Effects**Eye Irritation**

May cause eye irritation with susceptible persons.

Skin irritation

May cause skin irritation and/or dermatitis.

Inhalation

May cause irritation of respiratory tract.

Ingestion

Harmful if swallowed, Ingestion may cause irritation to mucous membranes.

Chronic toxicity**Carcinogenicity**

Contains no ingredients above reportable quantities listed as a carcinogen.

Legend**Subchronic toxicity****Sensitization**

No information available.

12. ECOLOGICAL INFORMATION**Ecotoxicity effects**

Experiments with similar products indicate no serious harmful effects on aquatic organisms.

Acute aquatic toxicity*Component Information*

Chemical Name	Toxicity to algae	Toxicity to fish	Toxicity to daphnia and other aquatic invertebrates
Isobornyl Acrylate	ErC 50 = 2.7 mg/L 96 h (Pseudokirchneriella subcapitata)	LC50 = 1.8 mg/L 96 h (Danio rerio)	EC 50 = 1.1 mg/L 48 h (Daphnia magna)
Caprolactam	130 mg/L EC50 72 h (Desmodesmus subspicatus) 160 mg/L EC50 96 h (Desmodesmus subspicatus)	LC50= 930 mg/L 96 h (Lepomis macrochirus) LC50= 1400 mg/L 96 h (Pimephales promelas)	EC50 > 500 mg/L 48 h

Effects on terrestrial organisms

No information available

Persistence and degradability

No information available

Bioaccumulative potential*Component Information*

Chemical Name	log Pow
Caprolactam	-0.02

13. DISPOSAL CONSIDERATIONS

Waste Disposal Methods

This material, as supplied, is not a hazardous waste according to Federal regulations (40 CFR 261). This material could become a hazardous waste if it is mixed with or otherwise comes in contact with a hazardous waste, if chemical additions are made to this material, or if the material is processed or otherwise altered. Consult 40 CFR 261 to determine whether the altered material is a hazardous waste. Consult the appropriate state, regional, or local regulations for additional requirements.

Contaminated packaging

Dispose of waste in compliance with local and national regulations.

US EPA Waste Number

Not applicable

14. TRANSPORT INFORMATION

DOT Not regulated

IMDG / IMO Not regulated

ICAO/IATA Not regulated

15. REGULATORY INFORMATION**International Inventories**

The components of this product are included on the following inventories or exempt from listing:

DSL/NDSL	Complies
TSCA	Complies

Legend

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

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory

U.S. Federal Regulations**OSHA Regulatory Status**

This material is considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200)

SARA 313

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product does not contain any chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372.

SARA 311/312 Hazard Categories

Acute Health Hazard	Yes
Chronic Health Hazard	no
Fire Hazard	no
Sudden Release of Pressure Hazard	no
Reactive Hazard	no

CERCLA

This material, as supplied, does not contain any substances regulated as hazardous substances under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302) or the Superfund Amendments and Reauthorization Act (SARA) (40 CFR 355). There may be specific reporting requirements at the local, regional, or state level pertaining to releases of this material.

U.S. State Regulations**California Proposition 65**

This product contains the following Proposition 65 chemicals:

U.S. State Right-to-Know Regulations

Chemical Name	Massachusetts	New Jersey	Pennsylvania	Illinois	Rhode Island
Stabilizer	X	X	X		X
(2-Methoxymethylethoxy)propanol	X	X	X	X	
Toluene	X	X	X	X	X

International Regulations**Mexico**

This safety data sheet was prepared in accordance with the Official Mexican Standard (NOM-018-STPS-2000)

Mexico - Grade

Slight risk, Grade 1

Canada**WHMIS Statement**

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations (CPR) and the MSDS contains all the information required by the CPR.

WHMIS Hazard Class

D2B Toxic materials

**16. OTHER INFORMATION**

Revision Date 2013-01-21

Revision Note No information available.

Disclaimer

This information is furnished without warranty, express or implied. This information is believed to be accurate to the best knowledge of Dymax Corporation and its subsidiaries and affiliates (DYMAX). The information in this SDS relates only to the specific material designated herein. DYMAX assumes no legal responsibility for use of or reliance upon the information in this SDS.

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