

Safety Data Sheet

according to HazCom 2012

SDS # : GR219

GR219

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Version 2

1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE COMPANY/UNDERTAKING**Product identifier****Product Name** GR219**Other means of identification****Product Code** GR219**Synonyms** Not applicable**Recommended use of the chemical and restrictions on use****Identified uses** Adhesives.**Uses advised against** No information available**Details of the supplier of the safety data sheet****Manufacturer Address** Dymax Corporation
318 Industrial Lane
Torrington, CT 06790
Tel: 860-482-1010
Fax: 860-496-0608**Information department:** North American Safety Department @ 1-860-482-1010**Emergency Telephone** North America: Chemtrec @ 1-800-424-9300 (24hrs)**2. HAZARDS IDENTIFICATION****Emergency Overview****Physical state** liquid**Odor** Characteristic**Color** colorless**Appearance** transparent**Classification****OSHA Regulatory Status**

This chemical is considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)

Skin corrosion/irritation	Category 2
Serious eye damage/eye irritation	Category 1
Skin sensitization	Category 1
Specific target organ toxicity (single exposure)	Category 3

Target Organ Effects

Respiratory system, EYES, Skin.

GHS Label elements, including precautionary statements



Signal word

Danger

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 - Prevention

Wash face, hands and any exposed skin thoroughly after handling

Wear protective gloves/protective clothing/eye protection/face protection

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

Contaminated work clothing should not be allowed out of the workplace

Use only outdoors or in a well-ventilated area

Precautionary Statements - Response

IF ON SKIN: Wash with plenty of soap and water, Take off contaminated clothing and wash before reuse, If skin irritation or rash occurs: Get medical advice/attention.

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

Precautionary Statements - Storage

Store in a well-ventilated place. Keep container tightly closed

Precautionary Statements - Disposal

Dispose of contents/container to an approved waste disposal plant.

Hazards not otherwise classified (HNOC)

None

Other Information**Unknown acute toxicity**

0 % of the mixture consists of ingredient(s) of unknown toxicity

3. COMPOSITION/INFORMATION ON INGREDIENTS

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

Chemical Name	CAS No	Weight-%	Trade Secret	Classification (Reg. 1272/2008)
Benzyl Methacrylate	2495-37-6	10 - 30	*	STOT SE 3 (H335) Skin Irrit. 2 (H315) Eye Irrit. 2 (H319)
2-Hydroxyethyl methacrylate	868-77-9	10 - 30	*	Skin Irrit. 2 (H315) Eye Irrit. 2A (H319) Skin Sens. 1 (H317)
Isobornyl Acrylate	5888-33-5	10 - 30	*	STOT SE 3 (H335) Skin Irrit. 2 (H315) Eye Irrit. 2 (H319) Aquatic Acute 2 (H401) Aquatic Chronic 2 (H411)
octyl acrylate	2499-59-4	5 - 10	*	STOT SE 3 (H335) Skin Irrit. 2 (H315)

				Eye Irrit. 2 (H319) Aquatic Chronic 2 (H411)
decyl acrylate	2156-96-9	5 - 10	*	STOT SE 3 (H335) Skin Irrit. 2 (H315) Eye Irrit. 2 (H319) Aquatic Chronic 2 (H411)
Acrylic acid	79-10-7	1 - 5	*	Flam. Liq. 3 (H226) Acute Tox. 4 (H302) Acute Tox. 4 (H312) Acute Tox. 4 (H332) Skin Corr. 1A (H314) STOT SE 3 (H335) Aquatic Acute 1 (H400)
gama-Glycidoxypropyltrimethoxysilane	2530-83-8	1 - 5	*	Eye Dam. 1 (H318)

Remaining ingredients are not considered hazardous in accordance with the Globally Harmonized System (GHS)

*The exact percentage (concentration) of composition has been withheld as a trade secret.

4. FIRST AID MEASURES

First aid measures

General advice

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

Eye contact

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

Skin Contact

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

Inhalation

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

Ingestion

If swallowed, Rinse mouth, Get medical attention.

Self-protection of the first aider

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

Most important symptoms and effects, both acute and delayed

Main Symptoms

No information available.

Indication of any immediate medical attention and special treatment needed

Note to physicians

Treat symptomatically.

5. FIRE-FIGHTING MEASURES

Suitable extinguishing media

Use CO₂, dry chemical, or foam.

Unsuitable extinguishing media

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

Specific hazards arising from the chemical

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

Hazardous combustion products

Hazardous decomposition products due to incomplete combustion.

Explosion data

Sensitivity to Mechanical Impact None.

Sensitivity to Static Discharge None.

Protective equipment and precautions for firefighters

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

Personal precautions

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

Environmental precautions

Environmental precautions

Do not allow material to contaminate ground water system, Try to prevent the material from entering drains or water courses, See Section 12 for additional Ecological Information, Local authorities should be advised if significant spillages cannot be contained.

Other Information

See Section 12 for additional Ecological Information.

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

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

7. HANDLING AND STORAGE

Precautions for safe handling

Advice on safe handling

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

Conditions for safe storage, including any incompatibilities

Technical measures and storage conditions

Keep container tightly closed in a dry and well-ventilated place, Protect from light.

Incompatible products

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

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters

Exposure Guidelines

Chemical Name	ACGIH TLV	OSHA PEL	NIOSH IDLH
Acrylic acid	TWA: 2 ppm S*	(vacated) TWA: 10 ppm	TWA: 2 ppm

		(vacated) TWA: 30 mg/m ³ S*	TWA: 6 mg/m ³
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Legend

ACGIH (American Conference of Governmental Industrial Hygienists)

TLV - Threshold Limit Value

OSHA (Occupational Safety and Health Administration of the US Department of Labor)

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

Eye/face protection

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

Skin and body protection

Wear protective gloves and 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, Do not breathe vapors, mist or gas.

Hygiene Measures

Handle in accordance with good industrial hygiene and safety practice, When using do not eat, drink or smoke, Wear suitable gloves and eye/face protection, Wash hands before breaks and at the end of workday, Regular cleaning of equipment, work area and clothing is recommended.

9. PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

Physical state	liquid	Odor	Characteristic
Appearance	transparent	Odor threshold	No information available
Color	colorless		
<u>Property</u>	<u>Values</u>	<u>Remarks / • Method</u>	
pH		No information available	
Melting point / freezing point		No information available	
Boiling point / boiling range		No information available	
Flash point	101 °C / 214 °F		
Evaporation rate		No information available	
Flammability (solid, gas)		No information available	
Flammability Limit in Air			
Upper flammability limit	-		
Lower flammability limit	-		
Vapor pressure		No information available	
Vapor density		No information available	
Specific Gravity		No information available	
Water Solubility	Practically insoluble		
Solubility in other solvents		No information available	
Partition coefficient: n-octanol/water		No information available	
Autoignition temperature		No information available	
Decomposition temperature		No information available	
Dynamic viscosity			

Kinematic viscosity	No information available	No information available
Explosive properties	No information available	
Oxidizing properties	No information available	

Other Information

Softening point	No information available
VOC Content (%)	4.48007003776729
Density	No information available
Bulk density	No information available

10. STABILITY AND REACTIVITY**Reactivity**

No information available

Chemical stability

Stable under normal conditions.

Possibility of Hazardous Reactions**Hazardous polymerization**

None under normal processing.

Conditions to avoid

Protect from light. Heat, flames and sparks.

Incompatible materials

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

Hazardous Decomposition Products

No decomposition if stored and applied as directed.

11. TOXICOLOGICAL INFORMATION**Information on toxicological effects****Acute toxicity****Information on likely routes of exposure**

Inhalation	There is no data for this product
Eye contact	There is no data for this product
Skin Contact	There is no data for this product
Ingestion	There is no data for this product

Symptoms	No information available.
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Delayed and immediate effects as well as chronic effects from short and long-term exposure

Sensitization	May cause sensitization of susceptible persons.
Mutagenic effects	No information available.
Reproductive toxicity	No information available.
Carcinogenicity	Contains no ingredients above reportable quantities listed as a carcinogen.
STOT - single exposure	No information available.
STOT - repeated exposure	No information available.

Target Organ Effects	Respiratory system, EYES, Skin.
Aspiration hazard	No information available.
Other adverse effects	No information available.
Chronic toxicity	Repeated contact may cause allergic reactions in very susceptible persons Avoid repeated exposure

Numerical measures of toxicity - Product Information

0 % of the mixture consists of ingredient(s) of unknown toxicity

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

ATEmix (oral)	5540 mg/kg
ATEmix (dermal)	5989 mg/kg
ATEmix (inhalation-dust/mist)	18.7 mg/l

Component Information

Chemical Name	Oral LD50	Dermal LD50	Inhalation LC50
2-Hydroxyethyl methacrylate	= 5050 mg/kg (Rat)	> 3000 mg/kg (Rabbit)	
Isobornyl Acrylate	= 4890 mg/kg (Rat)	> 5 g/kg (Rabbit)	
octyl acrylate	> 2000 mg/kg (Rat)	> 2000 mg/kg (Rabbit)	
decyl acrylate	> 2000 mg/kg (Rat)	> 2000 mg/kg (Rabbit)	
Acrylic acid	= 193 mg/kg (Rat) = 33500 µg/kg (Rat)	= 280 µL/kg (Rabbit) = 295 mg/kg (Rabbit)	= 5300 mg/m ³ (Rat) 2 h
gamma-Glycidioxypropyltrimethoxysilane	= 22600 µL/kg (Rat)	= 3970 µL/kg (Rabbit)	

12. ECOLOGICAL INFORMATION**Ecotoxicity**

0 % of the mixture consists of component(s) of unknown hazards to the aquatic environment.

Acute aquatic toxicity**Product Information**

Testing for acute and chronic aquatic effects determined no environmental classification is required.

Component Information

Chemical Name	Toxicity to algae	Toxicity to fish	Toxicity to daphnia and other aquatic invertebrates
Benzyl Methacrylate	-	LD50 4.25 - 5.13 mg/L 96 h (Pimephales promelas)	-
2-Hydroxyethyl methacrylate	-	LC50 = 227 mg/L 96 h (Pimephales promelas)	EC50 > 380 mg/l 48 h (Daphnia magna)
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)
Acrylic acid	EC50 0.04 mg/L 72 h (Desmodesmus subspicatus)	LC50 = 222 mg/L 96 h (Brachydanio rerio)	EC50 = 95 mg/L 48 h

Persistence and degradability No information available.

Bioaccumulation**Component Information**

Chemical Name	log Pow
2-Hydroxyethyl methacrylate	0.47
Isobornyl Acrylate	4.21

Acrylic acid	0.46
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Mobility in soil

No product level data available.

13. DISPOSAL CONSIDERATIONS

Waste treatment methods**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 in accordance with local regulations.

14. TRANSPORT INFORMATION

DOT Not regulated

ICAO/IATA Not regulated

IMDG/IMO Not regulated

15. REGULATORY INFORMATION

International Inventories

TSCA	Complies
AICS	Not listed
DSL/NDSL	Complies
EINECS/ELINCS	Complies
ENCS	Complies
IECSC	Complies
KECL	Complies
NZIoC	Not listed
PICCS	Not listed
ECSI	Not listed

Legend:

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

AICS - Australian Inventory of Chemical Substances

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

NZIoC - New Zealand Inventory of Chemicals

PICCS - Philippines Inventory of Chemicals and Chemical Substances

ECSI - Taiwan Existing Substance Inventory

US 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 contains a chemical or chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372:

Chemical Name	SARA 313 - Threshold Values %
Acrylic acid	1.0

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, contains one or more substances regulated as a hazardous substance under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302):

Chemical Name	Hazardous Substances RQs	CERCLA/SARA RQ	Reportable Quantity (RQ)
Acrylic acid	5000 lb		RQ 5000 lb final RQ RQ 2270 kg final RQ

US State Regulations**California Proposition 65**

This product contains chemical(s) known to the State of California to cause cancer and/or to cause birth defects or other reproductive harm.

U.S. State Right-to-Know Regulations

Chemical Name	New Jersey	Massachusetts	Pennsylvania
decyl acrylate	X	X	X
octyl acrylate			X
Acrylic acid	X	X	X
Methyl alcohol	X	X	X

16. OTHER INFORMATION

Prepared By EHS Department
Revision Date 2016-04-14

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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