

# Safety Data Sheet

according to HazCom 2012

SDS # : GR601

**GR601**

Issue Date 2015-12-10

Revision Date 2015-12-10

Version 1.02

**1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE COMPANY/UNDERTAKING****Product identifier****Product Name** GR601**Other means of identification****Product Code** GR601**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 exposed or concerned, 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.

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 INHALED: If breathing is difficult, remove victim to fresh air and keep at rest in a position comfortable for breathing.

IF SWALLOWED Get medical advice/attention if you feel unwell

Collect spillage.

**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**

May be harmful if swallowed

**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)
Isobornyl Acrylate	5888-33-5	30 - 60	*	STOT SE 3 (H335) Skin Irrit. 2 (H315) Eye Irrit. 2 (H319) Aquatic Acute 2 (H401) Aquatic Chronic 2 (H411)
2-Hydroxyethyl methacrylate	868-77-9	10 - 30	*	Skin Irrit. 2 (H315) Eye Irrit. 2A (H319) Skin Sens. 1 (H317)

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)
Silane Coupling Agent	Proprietary	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 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**

Move 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 CO<sub>2</sub>, 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 (CO<sub>2</sub>), carbon monoxide (CO), oxides of nitrogen (NO<sub>x</sub>), 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/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 (vacated) TWA: 30 mg/m <sup>3</sup> S*	TWA: 2 ppm TWA: 6 mg/m <sup>3</sup>

**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 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

**Hygiene measures**

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

**9. PHYSICAL AND CHEMICAL PROPERTIES****Information on basic physical and chemical properties**

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

<b>Decomposition temperature</b>		No information available
<b>Dynamic viscosity</b>	18 cP	
<b>Kinematic viscosity</b>		No information available
<b>Explosive properties</b>	No information available	
<b>Oxidizing properties</b>	No information available	

**Other Information**

<b>Softening point</b>	No information available
<b>VOC Content (%)</b>	4.92070009559393
<b>Density</b>	No information available
<b>Bulk density</b>	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**

<b>Inhalation</b>	There is no data available for this product
<b>Eye contact</b>	There is no data available for this product
<b>Skin Contact</b>	There is no data available for this product
<b>Ingestion</b>	There is no data available for this product
<b>Symptoms</b>	No information available.

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

<b>Sensitization</b>	May cause sensitization of susceptible persons.
<b>Mutagenic effects</b>	No information available.
<b>Reproductive toxicity</b>	No information available.
<b>Carcinogenicity</b>	Contains no ingredients above reportable quantities listed as a carcinogen.

<b>STOT - single exposure</b>	No information available.
<b>STOT - repeated exposure</b>	No information available.
<b>Target Organ Effects</b>	Respiratory system, EYES, Skin.
<b>Aspiration hazard</b>	No information available.
<b>Other adverse effects</b>	No information available.
<b>Chronic toxicity</b>	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 .

<b>ATEmix (oral)</b>	4257 mg/kg
<b>ATEmix (dermal)</b>	5106 mg/kg
<b>ATEmix (inhalation-dust/mist)</b>	30.6 mg/l
<b>ATEmix (inhalation-vapor)</b>	226.5 mg/l

**Component Information**

Chemical Name	Oral LD50	Dermal LD50	Inhalation LC50
Isobornyl Acrylate	= 4890 mg/kg ( Rat )	> 5 g/kg ( Rabbit )	
2-Hydroxyethyl methacrylate	= 5050 mg/kg ( Rat )	> 3000 mg/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 <sup>3</sup> ( Rat ) 2 h
Silane Coupling Agent	= 22600 µL/kg ( Rat )	= 3970 µL/kg ( Rabbit )	

**12. ECOLOGICAL INFORMATION****Ecotoxicity**

0 % of the mixture consists of components(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
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)
2-Hydroxyethyl methacrylate	-	LC50 = 227 mg/L 96 h (Pimephales promelas)	EC50 > 380 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
Isobornyl Acrylate	4.21
2-Hydroxyethyl methacrylate	0.47
Acrylic acid	0.46

**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.

This product contains one or more substances that are listed with the State of California as a hazardous waste.

## 14. TRANSPORT INFORMATION

**DOT** Not regulated

**ICAO/IATA** Not regulated

**IMDG/IMO** Not regulated

## 15. REGULATORY INFORMATION

**International Inventories**

<b>TSCA</b>	Complies
<b>AICS</b>	Not listed
<b>DSL/NDSL</b>	Complies
<b>EINECS/ELINCS</b>	Complies
<b>ENCS</b>	Not listed
<b>IECSC</b>	Not listed
<b>KECL</b>	Complies
<b>NZIoC</b>	Not listed
<b>PICCS</b>	Not listed
<b>ECSI</b>	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 2015-12-10

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.

end