

SAFETY DATA SHEET

Preparation Date: 8/10/2015

Revision Date: 8/10/2015

Revision Number: G1

1. IDENTIFICATION

Product identifier

Product code: E2861
Product Name: ETHYLENE GLYCOL DIMETHACRYLATE

Other means of identification

Synonyms: EDGMA
 1,2-Bis(methacryloyloxy)ethane
 Diglycol dimethacrylate
 Ethanediol dimethacrylate
 1,2-Ethane-diyl 2-methyl-2-propenoate
 Ethyldiol metacrylate
 Ethyldiol methacrylate
 Ethylene glycol bis(methacrylate)
 Ethylenedimethacrylate
 Glycol dimethacrylate
 Methacrylic acid ethylene ester
 Sartomer SR 206
 2-Propenoic acid, 2-methyl-, 1,2-ethane-diyl ester
CAS #: 97-90-5
RTECS # OZ4400000
CI#: Not available

Recommended use of the chemical and restrictions on use

Recommended use: In manufacture of plastics. Agent in dental materials. Synthesizing polymers. In polymeric fibers and resins. Research and Development.
Uses advised against No information available

Supplier: Spectrum Chemical Mfg. Corp
 14422 South San Pedro St.
 Gardena, CA 90248
 (310) 516-8000

Order Online At: <https://www.spectrumchemical.com>

Emergency telephone number Chemtrec 1-800-424-9300
Contact Person: Martin LaBenz (West Coast)
Contact Person: Ibad Tirmiz (East Coast)

2. HAZARDS IDENTIFICATION

Classification

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

Acute toxicity - Oral	Category 5
Skin sensitization	Category 1

Label elements

Warning

Hazard statements

May cause respiratory irritation
 May cause an allergic skin reaction



Hazards not otherwise classified (HNOC)

Not Applicable

Other hazards

May be harmful if swallowed

Precautionary Statements - Prevention

Avoid breathing dust/fume/gas/mist/vapors/spray
 Contaminated work clothing should not be allowed out of the workplace
 Wear protective gloves
 Use only outdoors or in a well-ventilated area

Precautionary Statements - Response

Specific treatment (see .? on this label)
 IF ON SKIN: Wash with plenty of soap and water
 If skin irritation or rash occurs: Get medical advice/attention
 Wash contaminated clothing before reuse
 IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. Call a POISON CENTER or doctor/physician if you feel unwell.

Precautionary Statements - Storage

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

Precautionary Statements - Disposal

Dispose of contents/container to an approved waste disposal plant

3. COMPOSITION/INFORMATION ON INGREDIENTS

Components	CAS-No.	Weight %	Trade Secret
Ethylene Glycol Dimethacrylate 97-90-5	97-90-5	100	*

4. FIRST AID MEASURES

First aid measures

General Advice:

Poison information centers in each State capital city can provide additional assistance for scheduled poisons (13 1126)

4. FIRST AID MEASURES

Skin Contact:	Wash off immediately with soap and plenty of water removing all contaminated clothes and shoes. Get medical attention if irritation develops. Consult a physician if necessary.
Eye Contact:	Flush eye with water for 15 minutes. Get medical attention if irritation occurs. If symptoms persist, call a physician.
Inhalation:	Move to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention.
Ingestion:	Do not induce vomiting without medical advice. Never give anything by mouth to an unconscious person. Consult a physician if necessary.

Most important symptoms and effects, both acute and delayed

Symptoms May cause irritation of respiratory tract. May cause allergic skin reaction. Can cause lung irritation .

Indication of any immediate medical attention and special treatment needed

Notes to Physician: Treat symptomatically

Protection of first-aiders

First-Aid Providers: Avoid exposure to blood or body fluids. Wear gloves and other necessary protective clothing. Dispose of contaminated clothing and equipment as bio-hazardous waste

5. FIRE-FIGHTING MEASURES

Extinguishing Media

Suitable Extinguishing Media: Dry chemical. Carbon dioxide (CO₂). Water, spray, mist, or foam. .

Unsuitable Extinguishing Media: No information available.

Specific hazards arising from the chemical

Hazardous Combustion Products: Carbon oxides

Specific hazards: May be ignited by heat, sparks or flames
Container explosion may occur under fire conditions or when heated
When heated to decomposition it emits acrid smoke and irritating fumes

Special Protective Actions for Firefighters

Specific Methods: No information available.

Special Protective Equipment 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. Keep people away from and upwind of spill/leak. Use personal protective equipment. Avoid contact with skin, eyes and clothing. Evacuate personnel to safe areas. Remove all sources of ignition. All equipment used when handling the product must be grounded.

Environmental precautions Prevent further leakage or spillage if safe to do so. Prevent product from entering drains. Prevent entry into waterways, sewers, basements or confined areas.

Methods and material for containment and cleaning up

Methods for containment Stop leak if you can do it without risk. Cover with plastic sheet to prevent spreading.

Methods for cleaning up Use appropriate tools to put the spilled material in a suitable chemical waste disposal container. Clean contaminated surface thoroughly.

7. HANDLING AND STORAGE

Precautions for safe handling

Technical Measures/Precautions:

Provide sufficient air exchange and/or exhaust in work rooms. Remove all sources of ignition. Keep away from incompatible materials.

Safe Handling Advice

Wear personal protective equipment. Avoid contact with skin, eyes and clothing. Do not breathe vapours/dust. Do not ingest. Do not smoke. Protect from light. Use only in well-ventilated areas. Keep away from heat and sources of ignition. Handle in accordance with good industrial hygiene and safety practice.

Conditions for safe storage, including any incompatibilities

Technical Measures/Storage Conditions:

Keep refrigerated. Do not store above 8°C/46.4°F. Sensitive to light. Store in light-resistant containers. Keep containers tightly closed in a dry, cool and well-ventilated place. Store in a segregated and approved area. Keep away from heat and sources of ignition. Store away from incompatible materials.

Incompatible Materials:

Oxidizing agents. Strong acids. Sulfuric acid. Nitric acid. Alkalis.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters

National occupational exposure limits

United States

Components	OSHA	NIOSH	ACGIH	AIHA WHEEL
Ethylene Glycol Dimethacrylate 97-90-5	None	None	None	None

Canada

Components	Alberta	British Columbia	Ontario	Quebec
Ethylene Glycol Dimethacrylate 97-90-5	None	None	None	None

Australia and Mexico

Components	Australia	Mexico
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Ethylene Glycol Dimethacrylate 97-90-5	None	None
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Appropriate engineering controls

Engineering measures to reduce exposure: Ensure adequate ventilation. Use process enclosures, local exhaust ventilation, or other engineering controls to keep airborne levels below recommended exposure limits. If user operations generate dust, fume or mist, use ventilation to keep exposure to airborne contaminants below the exposure limit.

Individual protection measures, such as personal protective equipment

Personal Protective Equipment

Eye protection: Goggles

Skin and body protection: Chemical resistant apron. Long sleeved clothing. Gloves.

Respiratory protection: Vapor respirator. Be sure to use an approved/certified respirator or equivalent.

Hygiene measures: Avoid contact with skin, eyes and clothing. When using do not eat or drink. Wash hands and face before breaks and immediately after handling the product.

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical state: Liquid	Appearance: No information available	Color: Colorless to pale yellow.
Odor: Ester-like.	Taste No information available	Molecular/Formula weight: 198.22 g/mol
Formula: C10H14O4	Flammability: No information available	Flash point (°C): 118°C
Flashpoint (°C/°F): 118°C/244°F	Flash Point Tested according to: Closed cup	Autoignition Temperature (°C/°F): No information available
Lower Explosion Limit (%): No information available	Upper Explosion Limit (%): No information available	pH: ~7
Melting point/range(°C/°F): -40°C/-40°F	Boiling point/range(°C/°F): 235-260°C/455-500°F	Bulk density: No information available
Decomposition temperature(°C/°F): 185°C/365°F	Density (g/cm3): 1.05	Specific gravity: No information available
Vapor pressure @ 20°C (kPa): 0.5	Evaporation rate: No information available	Vapor density: 6.84
VOC content (g/L): No information available	Odor threshold (ppm): No information available	Partition coefficient (n-octanol/water): 1.87
Viscosity: 3.038 mm ² /s	Miscibility: No information available	Solubility: Soluble in Ethanol Soluble in Benzene Soluble in Water

10. STABILITY AND REACTIVITY

Reactivity

Reactive with strong acids
Reactive with sulfuric acid
Reactive with nitric acid
Reactive with oxidizing agents
Reactive with alkalis

Chemical stability

Stability: Sensitive to light. Exposure to light accelerates decomposition.

Possibility of Hazardous Reactions: Hazardous polymerization does not occur

Conditions to avoid: Heat. Ignition sources. Incompatible materials. Exposure to light.

Incompatible Materials: Oxidizing agents. Strong acids. Sulfuric acid. Nitric acid. Alkalis.

Hazardous decomposition products: Carbon oxides.

Other Information

Corrosivity: No information available

Special Remarks on Corrosivity: No information available

11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure

Principal Routes of Exposure:

Skin. Inhalation. Ingestion.

Acute Toxicity

Component Information

Ethylene Glycol Dimethacrylate - 97-90-5

LD50/oral/rat = 3300 mg/kg Oral LD50 Rat

LD50/oral/mouse = 2000 mg/kg oral LD50 mouse

LD50/dermal/rat = No information available

LD50/dermal/rabbit = No information available

LC50/inhalation/rat = No information available

LC50/inhalation/mouse = No information available

Other LD50 or LC50 information = No information available

Product Information

LD50/oral/rat =

VALUE- Acute Tox Oral = No information available

LD50/oral/mouse =

Value - Acute Tox Oral = No information available

LD50/dermal/rabbit

VALUE-Acute Tox Dermal = No information available

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DIMETHACRYLATE

6 / 12

LD50/dermal/rat

VALUE -Acute Tox Dermal = No information available

LC50/inhalation/rat

VALUE-Vapor = No information available

VALUE-Gas = No information available

VALUE-Dust/Mist = No information available

LC50/Inhalation/mouse

VALUE-Vapor = No information available

VALUE - Gas = No information available

VALUE - Dust/Mist = No information available

Symptoms**Skin Contact:**

May cause skin irritation. It may be absorbed through the skin. May cause sensitization by skin contact. May cause allergic contact dermatitis.

Eye Contact:

May cause eye irritation. Symptoms may include stinging, tearing, redness.

Inhalation

Aerosols, or vapors which may be generated at elevated processing temperatures which can cause respiratory tract irritation. mucous membrane irritation. Symptoms may include coughing and shortness of breath.

Ingestion

Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhea.

Aspiration hazard

No information available

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

Repeated or prolonged skin contact may cause skin sensitization. Prolonged or repeated skin contact may cause allergic reaction.

Sensitization:

May cause sensitization by skin contact

Mutagenic Effects:

May affect genetic material

Carcinogenic effects:

Not considered carcinogenic

Components	IARC	ACGIH - Carcinogens	NTP	OSHA HCS - Carcinogens	Australia - Prohibited Carcinogenic Substances	Australia - Notifiable Carcinogenic Substances
Ethylene Glycol Dimethacrylate	Not listed	Not listed	Not listed	Not listed	Not listed	Not listed

Reproductive toxicity

No data is available

Reproductive Effects:

No information available

Developmental Effects:

No information available

Teratogenic Effects:

No information available

Specific Target Organ Toxicity**STOT - single exposure**

No information available

STOT - repeated exposure

No information available

Target Organs:

No information available

12. ECOLOGICAL INFORMATION

Ecotoxicity

Ecotoxicity effects: Harmful to aquatic organisms. May cause long-term adverse effects in the aquatic environment..

Ethylene Glycol Dimethacrylate - 97-90-5

Freshwater Algae Data: 17.3 mg/L growth inhibition *Pseudokirchneriella subcapitata* 72 h

Freshwater Fish Species Data: 15.95 mg/L LC50 *Sanio rerio* (Zebra fish) 96h

Water Flea Data: 44.9 mg/L EC50 *Daphnia magna* (water flea) 48h

Microtox Data	570 mg/L EC50 activated sludge 180min
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Persistence and degradability: Readily biodegradable

Bioaccumulative potential: No information available

Mobility: No information available

13. DISPOSAL CONSIDERATIONS

Disposal Methods

Waste from residues / unused products:

Waste must be disposed of in accordance with Federal, State and Local regulation.

Contaminated packaging:

Empty containers should be taken for local recycling, recovery or waste disposal. Do not re-use empty containers Dispose of as unused product.

Components	RCRA - F Series Wastes	RCRA - K Series Wastes	RCRA - P Series Wastes	RCRA - U Series Wastes
Ethylene Glycol Dimethacrylate	None	None	None	None

14. TRANSPORT INFORMATION

DOT

UN-No: Not Regulated
Proper Shipping Name: No information available
Hazard Class: No information available
Subsidiary Risk: No information available
Packing Group: None
ERG No: No information available
Marine Pollutant: No data available
DOT RQ (lbs): No information available

TDG (Canada)

UN-No: Not Regulated
Proper Shipping Name: No information available
Hazard Class: No information available
Subsidiary Risk: No information available
Packing Group: No information available

Product code: E2861

Product name: ETHYLENE GLYCOL
DIMETHACRYLATE

14. TRANSPORT INFORMATION

Description: No information available

ADR

UN-No: Not Regulated
Proper Shipping Name: No information available
Hazard Class: No information available
Packing Group: No information available
Subsidiary Risk: No information available
Classification Code: No information available
Description: No information available
CEFIC Tremcard No: No information available

IMO / IMDG

UN-No: Not Regulated
Proper Shipping Name: No information available
Hazard Class: No information available
Subsidiary Risk: No information available
Packing Group: No information available
Description: No information available
IMDG Page: No information available
Marine Pollutant No information available
MFAG: No information available
Maximum Quantity: No information available

RID

UN-No: Not Regulated
Proper Shipping Name: No information available
Hazard Class: No information available
Subsidiary Risk: No information available
Packing Group: No information available
Classification Code: No information available
Description: No information available

ICAO

UN-No: Not Regulated
Proper Shipping Name: No information available
Hazard Class: No information available
Subsidiary Risk: No information available
Packing Group: No information available
Description: No information available

IATA

UN-No: Not Regulated
Proper Shipping Name: No information available
Hazard Class: No information available
Subsidiary Risk: No information available
Packing Group: No information available
Description: No information available

15. REGULATORY INFORMATION

International Inventories

Components	U.S. TSCA	KOREA KECL	Philippines (PICCS)	Japan ENCS	CHINA	Australia (AICS)	EINECS-No.
Ethylene Glycol Dimethacrylate	Present	Present KE-24996	Present	Present (2)-1059 (2)-1056	Present	Present	Present 202-617-2

U.S. Regulations

California Prop. 65: Safe Drinking Water and Toxic Enforcement Act of 1986.

Chemicals Known to the State of California to Cause Cancer:

This product does not contain a chemical requiring a warning under California Prop. 65. (See table below)

Chemicals Known to the State of California to Cause Reproductive Toxicity:

This product does not contain a chemical requiring a warning under California Prop. 65. (See table below)

Components	Carcinogen	Developmental Toxicity	Male Reproductive Toxicity	Female Reproductive Toxicity:
Ethylene Glycol Dimethacrylate	Not Listed	Not Listed	Not Listed	Not Listed

CERCLA/SARA

Components	CERCLA - Hazardous Substances and their Reportable Quantities	Section 302 Extremely Hazardous Substances and TPQs	Section 302 Extremely Hazardous Substances and RQs	Section 313 - Chemical Category	Section 313 - Reporting <i>de minimis</i>
Ethylene Glycol Dimethacrylate	None	None	None	None	None

U.S. TSCA

Components	TSCA Section 5(a)2 - Chemicals With Significant New Use Rules (SNURS)	TSCA 8(d) -Health and Safety Reporting
Ethylene Glycol Dimethacrylate	Not Applicable	Not Applicable

Canada

WHMIS hazard class:

Non-controlled

Canada Controlled Products Regulation:

This product has been classified according to the hazard criteria of the CPR (Controlled Products Regulation) and the MSDS contains all of the information required by the CPR.

Inventory

Components	Canada (DSL)	Canada (NDSL)
Ethylene Glycol Dimethacrylate	Present	Not Listed

Components	CEPA Schedule I - Toxic Substances	CEPA - 2010 Greenhouse Gases Subject to Mandatory Reporting
Ethylene Glycol Dimethacrylate	Not listed	Not listed

EU Classification

R-phrase(s)

R37 - Irritating to respiratory system.

R43 - May cause sensitization by skin contact.

S -phrase(s)

S 2 - Keep out of the reach of children.

S24 - Avoid contact with skin.

S37 - Wear suitable gloves.

Components	Classification	Concentration Limits:	Safety Phrases
Ethylene Glycol Dimethacrylate	Xi; R37 R43	No information	S2 S24 S37

The product is classified in accordance with Annex VI to Directive 67/548/EEC

Indication of danger:

Xi - Irritant.

Xi

**16. OTHER INFORMATION**

16. OTHER INFORMATION

Preparation Date: 8/10/2015
Revision Date: 8/10/2015
Prepared by: Sonia Owen

Disclaimer:

All chemicals may pose unknown hazards and should be used with caution. This Safety Data Sheet (SDS) applies only to the material as packaged. If this product is combined with other materials, deteriorates, or becomes contaminated, it may pose hazards not mentioned in this SDS. The physical properties reported in this SDS are obtained from the literature and do not constitute product specifications. Information contained herein does not constitute a warranty, whether expressed or implied, as to the safety, merchantability or fitness of the goods for a particular purpose. Spectrum Chemicals & Laboratory Products, Inc. assumes no responsibility for results obtained or for incidental or consequential damages, including lost profits, arising from the use of these data. No warranty against infringement of any patent, copyright or trademark is made or implied. It shall be the user's responsibility to develop proper methods of handling and personal protection based on the actual conditions of use. While this SDS is based on technical data judged to be reliable, Spectrum assumes no responsibility for the completeness or accuracy of the information contained herein.

End of Safety Data Sheet