

Section 1. Product and Company Identification

Product Name Diurethane Dimethacrylate

Parchem - fine & specialty chemicals

415 Huguenot Street

New Rochelle, NY 10801

(914) 654-6800 **(914) 654-6899**

parchem.com **info@parchem.com**

EMERGENCY RESPONSE NUMBER

CHEMTEL

Toll Free US & Canada: 1 (800) 255-3924

All other Origins: 1 (813) 248-0585

Collect Calls Accepted

Section 2. Hazards Identification

Classification of the substance or mixture

Skin Sensitization - Category 1

GHS Label Elements

Pictograms:



Signal word: WARNING

Hazard and precautionary statements

Hazard Statements

May cause an allergic skin reaction.

Toxic to aquatic life.

Precautionary Statements - Prevention

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

Contaminated work clothing must not be allowed out of the workplace.

Wash face, hands and any exposed skin thoroughly after handling.

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

Avoid release to the environment.

Precautionary Statements - Response

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.

Precautionary Statements - Storage/Disposal

Dispose of contents/container in accordance with local/regional/national/international regulations.



Appearance: Clear to a pale yellow liquid

Physical State: Liquid

Odor: Ester-like

Section 3. Composition / Information on Ingredients

Common Name Diurethane Dimethacrylate
Synonym(s) UDMA Monomer; Urethane Dimethacrylate

COMPONENT	CAS NUMBER	CONCENTRATION
Diurethane Dimethacrylate	N/A	> 90.0%

Section 4. First Aid Measures

First Aid Measures

General Advice: Provide this SDS to medical personnel for treatment.

Eye Contact: If product gets in the eyes, flush with lukewarm water for at least 15 minutes. If irritation occurs, contact a physician.

Skin Contact: Wash with plenty of soap and water. If irritation or rash occurs, get medical attention.

Inhalation: Remove person to fresh air. Seek immediate medical attention/advice if you feel unwell.

Ingestion: If ingested, do not induce vomiting. Rinse mouth. Never give anything by mouth to an unconscious person. Get medical attention if you feel unwell.

Most Important Symptoms and Effects, both Acute and Delayed Symptoms

Eyes: Not expected to cause eye irritation. Symptoms of overexposure may include redness, itching, irritation and watering.

Skin: Liquid or high vapor concentration may cause sensitization and allergic reaction in some individuals resulting in contact dermatitis, severe irritation, dryness and cracking.

Inhalation: Not expected to cause respiratory tract irritation, but overexposure could lead to symptoms including coughing, mucous production, and shortness of breath.

Ingestion: Not expected to be an ingestion hazard under normal conditions of use.

Indication of any Immediate Medical Attention and Special Treatment Needed

Note to Physicians: Treat symptomatically. May cause more significant skin irritation in people with pre-existing skin conditions.

Section 5. Firefighting Measures

Suitable Extinguishing Media: Chemical foam, Carbon dioxide (CO₂), Dry chemical.

Unsuitable Extinguishing Media: Water may not be effective in extinguishing this fire.



Specific Hazards Arising from the Chemical: High temperatures, inhibitor depletion, accidental impurities, or exposure to radiation or oxidizers may cause spontaneous polymerizing reaction generating heat/pressure. Closed containers may rupture or explode during a runaway polymerization. Use a water spray or fog to reduce or direct vapors. Water may not be effective in actually extinguishing a fire involving this product.

Hazardous Combustion Products: Carbon oxides.

Protective Equipment and Precautions for Firefighters: When involved in a fire, this product may ignite and decompose to produce carbon oxides. Do not enter fire area without proper protection. Fight fire from a safe location. Heat/impurities may cause pressure to build and/or rupture closed containers, spreading fire, increasing risk of burns/injuries. Structural firefighters must wear SCBAs and full protective equipment.

Section 6. Accidental Release Measures

Personal Precautions, Protective Equipment and Emergency Procedures

Personal Precautions: Before cleaning any spill or leak, individuals must wear appropriate Personal Protective Equipment that is specified in section 8. Deny entry to all unprotected individuals. Remove any contaminated clothing and wash thoroughly before reuse.

Environmental Precautions: See Section 12 for additional ecological information. Keep spills and cleaning runoffs out of municipal sewers and open bodies of water.

Methods and Material for Containment and Cleaning Up

Methods for Containment: Prevent further leakage or spillage if safe to do so. Dike and contain spill with inert material (e.g. sand or earth).

Methods for Cleaning Up: Maximize ventilation (open doors and windows) and secure all sources of ignition. Use good, local ventilation with a minimum capture velocity of 100 ft/min (30 m/min) at point of monomer release. Place into appropriate closed container(s) for disposal in accordance with local, state and federal regulations. Wash all affected areas with plenty of warm water and soap.

Section 7. Handling and Storage

Precautions for Safe Handling

Advice on Safe Handling: Handle in accordance with good industrial hygiene and safety practice. Use personal protection recommended in Section 8. Keep away from heat, sparks, and flame. Keep container closed after each use. Do NOT use localized heat source such as band heaters to heat/melt product. Do NOT use steam. Hot boxes or hot rooms are recommended for heating the product, which can be set at a maximum temperature of 60°C/140°F. Avoid contact with skin, eyes and clothing. Use good personal hygiene and housekeeping. After use, wash hands and exposed skin with soap and water. Do not eat, drink, or smoke while handling product. Observe precautions found on label.



Conditions for Safe Storage, Including any Incompatibilities

Storage Conditions: Store containers in a cool, dry location, away from direct sunlight, heat, sparks, flame, other light sources, or sources of intense heat. Keep container closed after each use. Check inhibitor levels periodically, adding to the bulk material if needed. Maintain at a minimum, the original 2-inch headspace in the product container and do not blanket or mix with oxygen-free gas as it renders the inhibitor ineffective. Product residue may remain in empty containers. Observe all label precautions until the container is cleaned, reconditioned, or destroyed.

Incompatible Materials: Strong oxidizers, strong reducers, free radical initiators, inert gases, oxygen scavengers.

Section 8. Exposure Controls / Personal Protection

Exposure Guidelines: The following information is given as general guidance

Appropriate Engineering Controls

Engineering Controls: Use local exhaust at processing equipment, including buffers, sanders, grinders and polishers. High temperature processing equipment should be well ventilated.

Individual Protection Measures, such as Personal Protective Equipment

Eye/Face Protection: Wear safety glasses, chemical goggles when splashing is possible, when dealing with this material. If necessary, refer to U.S. OSHA 29 CFR §1910.133, or other appropriate governing standard. Ensure that an eyewash station, sink, or washbasin is available in case of exposure to eyes.

Skin and Body Protection: Avoid skin contact. Wear chemical resistant gloves for routine industrial use. If necessary, refer to U.S. OSHA 29 CFR §1910.138, or other appropriate governing standards. No special body protection is required under typical circumstances of use and handling.

Respiratory Protection: A respirator is recommended if using at elevated temperatures or under mist forming conditions. Use a NIOSH-approved air-purifying respirator with organic vapor cartridge or canister.

General Hygiene Considerations: Handle in accordance with good industrial hygiene and safety practice. Wash thoroughly after handling. An eyewash station and a safety shower are recommended. Food, beverages, and tobacco products should not be carried, stored, or consumed where this material is in use. Wash hands thoroughly before eating, drinking, or smoking.

Section 9. Physical and Chemical Properties

Physical State: Liquid

Appearance: Clear pale yellow liquid

Color: Clear pale yellow

Odor: Ester-like

Odor Threshold: Not determined

pH: Not determined

Melting Point/Freezing Point: Not determined

Boiling Point/Boiling Range: > 150°C / >300°F

Flash Point: > 93°C / > 200°F



Evaporation Rate: Not established
Flammability (Solid, Gas): Not applicable
Upper Flammability Limits: Not established
Lower Flammability Limit: Not established
Vapor Pressure: Not established
Vapor Density: Not established
Specific Gravity: 1.108 - 1.15
Water Solubility: Slightly soluble
Solubility in Other Solvents: Not determined
Partition Coefficient: Not established
Auto-ignition Temperature: Not established
Decomposition Temperature: Not established
Kinematic Viscosity: Not determined
Dynamic Viscosity: 6,000 - 11,000 cPs
Explosive Properties: Not determined
Oxidizing Properties: Not determined

Section 10. Stability and Reactivity

Reactivity: Reactive upon depletion of inhibitor.
Chemical Stability: Unstable upon depletion of inhibitor.
Possibility of Hazardous Reactions Hazardous Polymerization: Hazardous polymerization may occur.
Conditions to Avoid: High temperatures, localized heat sources (example drum or band heaters), oxidizing conditions, freezing conditions, direct sunlight, ultraviolet radiation, inert gas blanketing.
Incompatible Materials: Strong oxidizing agents, strong reducing agents, free radical initiators, inert gases, oxygen scavengers.
Hazardous Decomposition Products: Oxides of Carbon when heated to decomposition or burned.

Section 11. Toxicological Information

Information on Likely Routes of Exposure

Eye Contact: May cause minor eye irritation. Symptoms include burning sensation, tearing, redness, or swelling
Skin Contact: Skin sensitization hazard. May cause delayed skin irritation and blistering.
Inhalation: May be a slight respiratory tract irritation hazard if used at elevated temperatures or processes which generate an aerosol or mist. Symptoms of irritation may include coughing, mucous production, and shortness of breath.
Ingestion: Not expected to be an ingestion hazard under normal conditions of use.

Information on Physical, Chemical and Toxicological Effects

Symptoms: Please see section 4 of this SDS for symptoms.



Delayed and Immediate Effects as well as Chronic Effects from Short and Long-term Exposure

Numerical Measures of Toxicity

Oral LD50 - Rat: > 5000 mg/kg

OECD Guideline 401

Skin Corrosion/Irritation - Rabbit: Not irritating

OECD Guideline 404

Eye Damage/Irritation - Rabbit: Not irritating

OECD Guideline 405

Sensitization, Skin - Mouse: Sensitizing

OECD Guideline 429

Germ Cell Mutagenicity: Negative

OECD Guideline 471

Carcinogenicity: This product does not contain any carcinogens or potential carcinogens as listed by OSHA, IARC or NTP.

Reproductive Toxicity: This product is not reported to produce reproductive effects in humans.

Developmental Toxicity: This product is not reported to produce embryotoxic effects in humans.

Teratogenicity: This product is not reported to cause teratogenic effects in humans.

Chronic Toxicity: None listed.

Target Organ Effects: None listed.

Section 12. Ecological Information

Ecotoxicity: Very large releases are expected to be hazardous to the aquatic environment.

Persistence and Degradability: Not determined

Bioaccumulation: Not determined

Mobility: Not determined

Other Adverse Effects: Not determined

Section 13. Disposal Considerations

Waste Treatment Methods: Dispose of product and contaminated packaging in accordance with all local, state, and federal environmental control regulations.

Section 14. Transport Information

Note: Please see current shipping paper for most up to date shipping information, including exemptions and special circumstances.

DOT: Non-hazardous - not regulated

IATA: Non-hazardous - safe for air travel

IMDG: Not regulated



Section 15. Regulatory Information

International Inventories

TSCA: Listed

DSL: Listed

NDSL: Listed

EINECS: Listed

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

REACH

Registration type: Pre-registration

Registration number: 05-2114596843-32-0000

US Federal Regulations: None listed.

SARA 311/312 Hazard Categories

Acute health hazard: Yes

Chronic Health Hazard: No

Fire hazard: No

Sudden release of pressure hazard: No

Reactive Hazard: Yes

SARA 313: Not determined

US State Regulations: Not Listed

US State Right-to-Know Regulations: Not Determined

NFPA Rating

Health: 2

Flammability: 1

Reactivity: 1

Special Hazards: Not determined

HMIS Rating

Health: 2

Flammability: 1

Reactivity: 1

Personal Protection: Safety glasses; Gloves



Section 16. Other Information

Disclaimer: The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. The information in this document is based on the present state of our knowledge and is applicable to the product with regard to appropriate safety precautions. It does not represent any guarantee of the properties of the product.

REVISION DATE: 8/19/2015

