

Section 1. Product and Company Identification

Product Name Dioctyl Maleate
CAS Number 142-16-5

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

GHS Classifications

Acute aquatic toxicity (Category 1)
Acute Toxicity, Oral (Category 5)
Chronic aquatic toxicity (Category 1)
Skin irritation (Category 3)
Specific target organ toxicity - repeated exposure (Category 2)

GHS Label Elements

Pictograms:



Signal word: WARNING

Hazard and precautionary statements

Hazard statements

H303: May be harmful if swallowed.
H316: Causes mild skin irritation.
H373: May cause damage to organs through prolonged or repeated exposure.
H410: Very toxic to aquatic life with long lasting effects.

Precautionary statements

P273: Avoid release to the environment.
P391: Collect spillage.
P501: Dispose of contents and container to an approved waste disposal plant.
P260: Do not breathe dust/fume/gas/mist/vapors/spray.
P314: Get medical advice/attention if you feel unwell.



Other hazards which do not result in classification

Potential Health Effects

Eyes: Can be irritating to the eyes

Ingestion: Can be harmful if swallowed.

Inhalation: Can be harmful if inhaled. can be irritating to the respiratory tract.

Skin: Can be harmful if absorbed through the skin. Can be irritating to the skin.

OSHA Hazards: No OSHA hazards

NFPA

Health: 1

Flammability: 1

Reactivity: 0

Section 3. Composition / Information on Ingredients

Common Name Dioctyl Maleate
Synonym(s) DOM; Dioctyl Maleate; Di-2-ethylhexyl Maleate; Bis(2-Ethylhexyl) Maleate
Formula $C_{20}H_{36}O_4$
CAS Number 142-16-5

COMPONENT	CAS NUMBER	CONCENTRATION
Dioctyl Maleate	142-16-5	100%

Section 4. First Aid Measures

General advice: Take proper precautions to ensure your own health and safety before attempting rescue and providing first aid. Consult a physician. Show this safety data sheet to the doctor in attendance. Move out of dangerous area.

Skin: Wash skin with soap and copious amounts of water. Seek medical attention.

Inhalation: Remove person to fresh air. If signs/symptoms continue, get medical attention. Give oxygen or artificial respiration as needed.

Eyes: Flush eyes with water as a precaution.

Ingestion: Do not induce vomiting. If vomiting does occur, have victim lean forward to prevent aspiration. Rinse mouth with water. Seek medical attention. Never give anything by mouth to an unconscious individual.

Section 5. Firefighting Measures

Suitable (and unsuitable) extinguishing media: Use water spray, alcohol-resistant foam, dry chemical, or carbon dioxide

Specific hazards arising from the chemical (e.g., nature of any hazardous combustion products): No data available.



Special protective equipment and precautions for firefighters: Wear self-contained breathing apparatus and protective clothing to prevent contact with skin and eyes. Keep unopened containers cool by spraying with water.

Flammable Properties

Classification: OSHA/NFPA Class III B Combustible Liquid.

Flash point (Closed Cup): 185°C (365°F)

Section 6. Accidental Release Measures

Personal precautions, protective equipment, and emergency procedures: Do not inhale vapors, mist, or gas. Avoid dust formation.

Environmental precautions: Stop leak. Contain spill if possible and safe to do so. Prevent product from entering drains.

Methods and materials for containment and cleaning up: Absorb with an inert dry material and place in an appropriate waste disposal container. Keep disposal containers closed when finished.

Section 7. Handling and Storage

Precautions for safe handling: Provide proper exhaust ventilation system in areas where dust forms. Take normal fire prevention measures.

Conditions for safe storage, including any incompatibilities: Keep container tightly closed in a cool, dry, and well-ventilated place. Light sensitive. Store under inert gas.

Section 8. Exposure Controls / Personal Protection

Individual protection measures, such as personal protective equipment

Respiratory protection: Respiratory protection is not required. Where protection from nuisance levels of dusts are desired, use type N95 (US) or type P1 (EN 143) dust masks. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

Hand protection: Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands.

Eye protection: Use chemical safety goggles and/or a full face shield where splashing is possible. Use equipment approved by appropriate government standards, such as NIOSH (US) or EN166 (EU). Maintain eye wash fountain and quick-drench facilities in work area.

Skin and body protection: Choose body protection according to the amount and concentration of the dangerous substance at the work place.



Hygiene measures: Handle in accordance with good industrial hygiene and safety practice.
Wash hands before breaks and at the end of workday

Section 9. Physical and Chemical Properties

Appearance: Colorless, clear liquid
Odor: Ester-like
Odor threshold: Specific data not available
pH: Specific data not available
Freezing point: -60°C (-76°F)
Initial boiling point and boiling range: 156°C (313°F)
Flash point: 185°C (365°F)
Evaporation rate: Specific data not available
Flammability (solid, gas): Flammable
Upper/Lower flammability or explosive limits: Specific data not available
Vapor pressure: Specific data not available
Vapor Density: Specific data not available
Relative Density: 0.944 g/cm³ at 25°C (77°F)
Solubility: Insoluble in water
Partition coefficient (n-octanol/water): log Pow: 7.24
Auto-ignition temperature: Specific data not available
Decomposition temperature: Specific data not available
Molecular Weight: 340.50 g/mol

Section 10. Stability and Reactivity

Chemical Stability: Stable under recommended storage conditions.
Possibility of hazardous reactions: No data available
Conditions to avoid (e.g., static discharge, shock, or vibration): Heat, flames, and sparks. Extreme temperatures and direct sunlight.
Incompatible materials: Strong oxidizing agents
Hazardous decomposition products: No data available

Section 11. Toxicological Information

Product Summary: No data available for the mutagenic, teratogenic, or reproductive effects of the product. No data available to designate product as an aspiration hazard or to cause specific target organ toxicity through single exposure.

Acute Toxicity

LD50 (Dermal): Rabbit - 14,154 mg/kg
LD50 (Oral): Rat - 14,000 mg/kg
LD50 Intraperitoneal: Rat - > 5,000 mg/kg



Irritation

Eyes: Rabbit - no eye irritation

Respiratory or Skin Sensitization: Maximization Test - Guinea Pig - Sensitization not displayed in laboratory animals when following OECD Test Guideline 406.

Skin: Rabbit - Mild skin irritation - 24 hours

Specific target organ toxicity - repeated exposure (Globally Harmonized System):

May Cause damage to organs through prolonged or repeated exposure. **Route:** Oral.

Affected Organs: Kidneys

Carcinogenicity

IARC: No components of this product, present at levels greater than or equal to 0.1%, is identified as probable or confirmed human carcinogen by IARC.

ACGIH: No components of this product, present at levels greater than or equal to 0.1%, is identified as a carcinogen or potential carcinogen by ACGIH.

NTP: No components of this product, present at levels greater than or equal to 0.1%, is identified as a known or anticipated carcinogen by NTP.

OSHA: No components of this product, present at levels greater than or equal to 0.1%, is identified as a carcinogen or potential carcinogen by OSHA

Other Hazards

Eyes: Can be irritating to the eyes.

Ingestion: Can be harmful if ingested.

Inhalation: Can be harmful if inhaled. Can be irritating to the respiratory tract.

Skin: Can be harmful if absorbed through skin. Can be irritating to the skin

Section 12. Ecological Information

Ecotoxicity (aquatic and terrestrial, where available)

Acute Daphnia Toxicity: EC50/48 h/Water flea - 59.5 mg/l

Acute Fish Toxicity: LC50/96 hours/Zebra fish - >100 mg/L

Acute Algae Toxicity: EC50/72h/Green Algae - > 0.62 mg/L

Toxicity to Bacteria: EC50/3 hr/Sludge treatment - >1000 mg/L

Persistence and degradability: No data available

Bio accumulative potential: No data available

Other adverse effects: Environmental hazard can occur if product is improperly handled or through improper disposal



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

IMDG: Not a dangerous good.

Marine pollutant: No

IATA: Not a dangerous good.

Section 15. Regulatory Information

Safety, health and environmental regulations specific for the product in question

OSHA Hazards: No OSHA hazards

All ingredients are on the following inventories or are exempted from listing

Country	Notification
Australia	AICS
Canada	DSL
China	IECS
European Union	EINECS
Japan	ENCS/ISHL
Korea	ECL
New Zealand	NZIoC
Philippines	PICCS
United States of America	TSCA

SARA 302 Components

SARA 302: No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

SARA 313 Components

SARA 313: This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.

SARA 311/312 Hazards: No SARA Hazards

CERCLA: No chemicals in this material with known CAS numbers are subject to the reporting requirements of CERCLA



Massachusetts Right to Know Components

No components are subject to the Massachusetts Right to Know Act.

Pennsylvania Right to Know Components

Bis(2-ethylhexyl) maleate (CAS-No. 142-16-5)

New Jersey Right to Know Components

Bis(2-ethylhexyl) maleate (CAS-No. 142-16-5)

California Prop 65 Components: This product does not contain any chemicals known to State of California to cause cancer, birth defects, or any other reproductive harm.

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: 10/15/2015

