

# SDS – SAFETY DATA SHEET

## 1. PRODUCT AND COMPANY IDENTIFICATION

**Product name:** 1,1,1,3,3,3-Hexafluoroisopropyl methacrylate (CAS # 3063-94-3)

**Synonym:** HFIP Methacrylate, 2,2,2-Trifluoro-1-(trifluoromethyl)ethyl methacrylate, MAHFIP, HFIPMA

**Chemical Formula:** C<sub>7</sub>H<sub>6</sub>F<sub>6</sub>O<sub>2</sub>

**Recommended Use of the Chemical:** Laboratory Chemicals, Manufacture of substances

**Uses Advised Against:** N/A

### SECTION I: MANUFACTURER

HALOCARBON PRODUCTS CORPORATION

1100 Dittman Court North Augusta, SC

Website: [www.halocarbon.com](http://www.halocarbon.com)

Email: [sds@halocarbon.com](mailto:sds@halocarbon.com)

Emergency CHEMTREC Phone: 800 424-9300 United States 001-703-527-3887 International & Maritime

Emergency Number: (803)278-3504

Customer Service & Sales (470)419-6364

Prepared by: MSDS Coordinator

## 2. HAZARDS IDENTIFICATION

### OSHA Hazards

Flammable liquids (Category 2), H225

Skin irritation (Category 2), H315

Eye irritation (Category 2A), H319

### GHS Label elements, including precautionary statements

Pictogram



Signal word Danger

Hazard statement(s)

H225

Highly flammable liquid and vapor.

H302 + H312 + H332

Harmful if swallowed, in contact with skin or if inhaled

H315

Causes skin irritation.

H319

Causes serious eye irritation.

H335

May cause respiratory irritation.

Precautionary statement(s)

P210

Keep away from heat/sparks/open flames/hot surfaces. - No smoking.

P233

Keep container tightly closed.

P240	Ground/bond container and receiving equipment.
P241	Use explosion-proof electrical/ ventilating/ lighting/ equipment.
P242	Use only non-sparking tools.
P243	Take precautionary measures against static discharge
P280	Wear protective gloves/protective clothing/eye protection/face protection.
P305+P351+P338	If in eyes rinse continuously for several minutes. Remove contact lenses if present and easy to do so.

### 3. COMPOSITION/INFORMATION ON INGREDIENTS

Hazardous Components	CAS	OSHA PEL	ACGIH TLV	Other Limits
1,1,1,3,3,3-Hexafluoroisopropyl methacrylate	3063-94-3	None	None	None

### 4. FIRST AID MEASURES

Inhalation: Remove to fresh air. Get medical attention immediately. If breathing has stopped give artificial respiration if necessary. If breathing is difficult administer oxygen by authorized personnel only until person is able to breathe easily.

Skin: Wash affected area with soap and water. Remove contaminated clothing and shoes. Seek medical help.

Eye: Flush eyes with plenty of water for at least 15 minutes. Get medical help immediately

Oral: If swallowed get medical attention. Never give anything by mouth to an unconscious person.

Other Health hazards: No information available.

### 5. FIREFIGHTING MEASURES

Flash Point/Method: 14°C (closed cup)                      Autoignition Temp: Not determined

Flammability Limits in Air                      LEL: Not determined                      UEL: Not determined

Extinguishing Media: Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

Special Fire Fighting Procedures: Wear self-contained breathing apparatus and protective clothing to prevent contact with skin or eyes.

Unusual fire and explosion Hazards: Thermal decomposition products will be toxic and corrosive. Include toxic fumes of carbon dioxide, carbon monoxide and hydrogen fluoride. Flammable liquid, vapor may travel considerable distance to source of ignition and flash back.

## 6. ACCIDENTAL RELEASE MEASURES

Spill, Leak or Release: Use personal protective equipment. Avoid contact with skin and eyes. Avoid inhalation of material. Ensure adequate ventilation. Remove all sources of ignition. Beware of vapors accumulating to form explosive concentrations. Vapors can accumulate in low areas. Evacuate personnel to safe area.

Contain spillage, and then collect with an electrically protected vacuum cleaner or by wet-brushing and place in a closed container for disposal according to local regulations. Ventilate area and wash spill site after material is picked up.

Waste disposal: Dispose in accordance with all federal, state and local regulations. Burn in chemical incinerator equipped with after burner and scrubber. Exert care as material is flammable.

## 7. HANDLING AND STORAGE

### Precautions for safe handling

Avoid contact with skin and eyes. Avoid inhalation of vapor or mist.

Use explosion-proof equipment. Keep away from sources of ignition - No smoking. Take measures to prevent the buildup of electrostatic charge.

### Conditions for safe storage

Keep container tightly closed in a dry and well-ventilated place. Containers which are opened must be carefully resealed and kept upright to prevent leakage.

Recommended storage temperature: 2 - 8 °C

## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Respiratory: Where appropriate use a full-face air purifying respirator with multi-purpose combination respirator cartridges as backup to engineering controls. Use NIOSH approved respirator. Self-contained breathing apparatus for emergency use. Use in fume hood for experimental purposes.

Ventilation: Provide local exhaust ventilation system. Ensure compliance with applicable exposure limits.

Eye protection: Safety glasses or goggles with an appropriate face shield.

Gloves: Wear appropriate chemical resistant gloves.

Other equipment: Eyewash and quick drench shower facilities should be available. Flame retardant antistatic clothing should be used. Type of protective equipment must be selected based on amount of dangerous substance at specific workplace

## 9. PHYSICAL AND CHEMICAL PROPERTIES

### Appearance

Form: Liquid

Color: colorless

Boiling point: 106-107°C

Vapor Pressure: Not determined

Melting point: Not determined

Vapor Density: Not available

Specific Gravity (H<sub>2</sub>O=1): ~1.29 g/mL@ 20C

Solubility in Water: Not miscible

#### 10. STABILITY AND REACTIVITY

Unstable

Stable

##### Chemical stability

Stable under recommended storage conditions.

Contains the following stabiliser(s):

Mequinol (100 ppm)

##### Possibility of hazardous reactions

Vapours may form explosive mixture with air.

##### Conditions to avoid

Heat, flames and sparks. Extremes of temperature and direct sunlight.

##### Incompatible materials

Strong oxidizing agents, Polymerizing initiators

Hazardous Combustion or Decomposition Products: Vapors may form explosive mixture with air. Include toxic fumes of carbon dioxide, carbon monoxide and hydrogen fluoride.

#### 11. TOXICOLOGICAL INFORMATION

Material may be destructive to tissue of the mucous membrane and upper respiratory tract, eyes and skin. It may cause coughing, wheezing, laryngitis, shortness of breath, headache and nausea. May be harmful if absorbed through skin.

To the best of our knowledge the toxicological properties of this compound have not been completely determined.

Primary routes of entry:  Inhalation  Skin  Eyes  Oral

Carcinogenicity listing:  NTP  IARC  OSHA

Other

#### 12. ECOLOGICAL INFORMATION

No data available.

#### 13. DISPOSAL CONSIDERATIONS

Burn in a chemical incinerator equipped with an afterburner and scrubber but exert extra care in igniting as this material is flammable. Offer surplus and non-recyclable solutions to a licensed disposal company. Contact a licensed professional waste disposal service to dispose of this material.

## 14. TRANSPORT INFORMATION

### DOT (US)

UN number: 3272 Class: 3 Packing group: II

Proper shipping name: Esters, N.O.S.

Poison Inhalation Hazard: No

### IMDG

UN number: 3272 Class: 3 Packing group: II EMS-No: F-E, S-D

Proper shipping name: ESTERS, N.O.S. ((2,2,2-Trifluoro-1-(trifluoromethyl)ethyl methacrylate)

### IATA

UN number: 3272 Class: 3 Packing group: II

Proper shipping name: Esters N.O.S. (2,2,2-Trifluoro-1-(trifluoromethyl)ethyl methacrylate)

## 15. REGULATORY INFORMATION

Eye Irrit. Eye irritation

Flam. Liq. Flammable liquids

H225 Highly flammable liquid and vapour.

H315 Causes skin irritation.

H319 Causes serious eye irritation.

H335 May cause respiratory irritation.

Skin Irrit. Skin irritation

### HMIS Rating

Health hazard: 2

Chronic Health Hazard: No

Flammability: 3

Physical Hazard 0

Material is on TSCA inventory

## 16. OTHER INFORMATION

The above information is believed to be correct but does not purport to be all inclusive and should be used as a guide only. Halocarbon shall not be held liable for any damages resulting from handling this product.

Compiled April 27, 2016