



山东东岳化工有限公司

SHANDONG DONGYUE CHEMICAL CO., LTD

地址: 山东省淄博市桓台县唐山镇

Tangshan Town, Huantai County, Zibo City, Shandong, China

Tel: 0086 533 8518666 Fax: 0086 533 8516888 Email: dyjingyong@163.com

---

## R32 Material Safety Data Sheet

### 1. PRODUCT AND COMPANY IDENTIFICATION

Product Name: DIFLUOROMETHANE

Company: Shandong Dongyue Chemical Co.,Ltd

Street Address: Huantai County,

City, Province, Zip, Country: Zibo City, Shandong Province, China,  
256401

Chem-tract: +86-533-8518666

MEDICAL: +86-533-8510073

#### 2. Composition/Information on Ingredient

Substance Name CAS Registry Number

DIFLUOROMETHANE 75-10-5

Formula: CH<sub>2</sub>F<sub>2</sub>

Synonyms: Carbon fluoride hydride \* Difluoromethane \* Methylene  
Difluoride

### 3. Hazards Identification

#### EMERGENCY OVERVIEW

Flammable Highly Flammable, Extremely Flammable Liquefied Gas.

For additional information on toxicity, please refer to Section 11

### 4. FIRST AID MEASURES

#### ORAL EXPOSURE

If swallowed, wash out mouth with water provided person is conscious.

Call a physician

#### INHALATION EXPOSURE

If inhaled, remove to fresh air. If not breathing give artificial respiration.

If breathing is difficult, give oxygen.

#### DERMAL EXPOSURE

In case of skin contact, flush with copious amounts of water for at least  
15 minutes. Remove contaminated clothing and shoes. Call a  
physician.

## EYE EXPOSURE

In case of contact with eyes, flush with copious amounts of water for at least 15 minutes. Assure adequate flushing by separating the eyelids with fingers. Call a physician.

## 5, Fire Fighting Measure

FLASH POINT N/A

AUTOIGNITION TEMP N/A

FLAMMABILITY N/A

## FIREFIGHTING

Protective Equipment: Wear self-contained breathing apparatus and protective clothing to prevent contact with skin and eyes. Specific

Hazards: Emits toxic fumes under fire conditions

## 6, Accidental Release Measure

PROEDURE TO BE FOLLOWED IN CASE OF LEAK OR SPILL

Evacuate area and keep personal upwind. Shut off all sources of ignition. Shut off leak if there is no risk.

## METHODS FOR CLEANING UP

Ventilate area and wash spill site after material pickup is complete.

## 7, Handling and Storage

### HANDLING

User Exposure: Do not breathe gas. Do not get in eyes, on skin, on clothing. Avoid prolonged or repeated exposure.

### STORAGE

Suitable: Keep tightly closed. Keep away from heat, sparks, and open flame. Store in a cool dry place. Cylinder temperature should not exceed 125 F (52°C)

### SPECIAL REQUIREMENTS

Contents under pressure.

## 8, Exposure Controls

### ENGINEERING CONTROLS

Mechanical exhaust required .Safety shower and eye bath.

### WORK PRACTICES

Store and use with adequate ventilation

### PERSONAL PROTECTIVE EQUIPMENT

Respiratory: Government approved respirator in nonventilation. Areas and/or for exposure above the TLV or PEL.

Hand: Compatible chemical-resistant gloves.

Eye: Chemical safety goggles.

### GENERAL HYGIENE MEASURES

Wash thoroughly after handling.

## 9, Physical/Chemical Properties

Appearance; N/A

Molecular Weight 52.02 AMU

pH N/A

BP/BP Range -51.6°C

MP/MP Range -136°C

Freezing Point N/A

Vapor Pressure: N/A

Vapor Density N/A

Saturated Vapor Conc, N/A

SG/Density: 1.1 g/cm<sup>3</sup>

Bulk Density: N/A

Odor Threshold N/A

Volatile % N/A

VOC Content N/A

Water Content N/A

Solvent Content N/A

Evaporation Rate N/A

Viscosity N/A

Surface Tension N/A

Partition Coefficient N/A

Decomposition Temp N/A

Flash Point N/A

Explosion Limits N/A

Flammability N/A

Autoignition Temp N/A

Refractive Index N/A

Optical Rotation N/A

Miscellaneous Data N/A

Solubility N/A

N/A= not available

## 10, Stability and Reactivity

### STABILITY

Reactions to Avoid: Reacts violently with:

Materials to Avoid: Sodium, Potassium, Calcium, Alkali metals.

### HAZARDOUS DECOMPOSITION PRODUCTS

Hazardous Decomposition products: Carbon monoxide, Carbon dioxide, Hydrogen fluoride.

## 11, Toxicological Information

## ROUTE OF EXPOSURE

Skin Contact: Can cause severe frostbite. Prolonged or repeated exposure to skin causes defrosting and dermatitis. May cause skin irritation.

Eye Contact: May cause eye eye irritation.

Inhalation: Material may be irritating to mucous membranes and upper respiratory tract.

Multiple Routes: May be harmful by inhalation, ingestion, or skin absorption.

## TARGET ORGAN OR SYSTEM

Damage to the heart. Heart.

## SIGNS AND SYMPTOMS OF EXPOSURE

Exposure can cause: Narcotic effect. Exposure to large amounts can cause: Damage to the heart.

Inhalation

Mouse Rat

1,810,000 mg/m<sup>3</sup> 1,890,000 mg/m<sup>3</sup>

LC 50 LC50

Remarks: Behavioral: Change in motor activity.

Behavioral: Ataxia. Lungs, Thorax, or Respiration: Respiratory depression.

## CHRONIC EXPOSURE – TERATOGEN

Species: Rat

Dose: 50000 PPM/6H 50000 PPM/6H

Route of Application: Inhalation

Exposure Time: (6-15 PREG)

Result: Effects on Embryo or Fetus: Fetotoxicity (except death, e, g, stunted fetus) Effects on Embryo or Fetus; Fetotoxicity ( except death, e, g, stunted fetus)

12, Ecological Information

No data available.

13, Disposal Considerations

## APPROPRIATE METHOD OF DISPOSAL OF SUBSTANCE OR PREPARATION

Observe all federal, state, and local environmental regulations.

## APPROPRIATE METHOD OF DISPOSAL OF CONTAMINATED PACKAGING

Caution: No-return cylinder. Do not reuse. Empty cylinder will contain hazardous residue. Follow proper disposal techniques.

14, Transport Information

Proper Shipping Name: Difluoromethane

UN Number:3252

Not Allowed – Aircraft; Cargo aircraft only. Not permitted on passenger aircraft.

### 15 Regulatory Information

#### EU ADDITIONAL CLASSIFICATION

Symbol of Danger: F

Indication of Danger: Highly Flammable.

R:11

Risk Statements: Highly Flammable.

S: 9 16 33

Safety Statements: Keep container in well-ventilated place. Keep away from sources of ignition – no smoking , Take precautionary measures against static discharges.

#### US CLASSIFICATION AND LABEL TEXT

Indication of Danger: Flammable (USA) Highly Flammable (EU).

Risk Statements: Extremely flammable liquefied gas.

Safety Statements: keep container in a well-ventilated place. Keep away from sources of ignition – no smoking. Take precautionary measures against static discharges.

US Statements: Target organ: Heart

#### UNITED STATES REGULATORY INFORMATION

SARA LISTED; No

TSCA INVENTORY ITEM: Yes

#### CANADA REGULATORY INFORMATION

WHMIS Classification: This product has been classified in accordance with the hazard criteria of the CPR, and the MSDS contains all the information required by the CPR.

DSL: No

NDSL: Yes

### 3. OTHER INFORMATION

#### Revision Information

Revision Date 17 JUN 2003

Key

N/E= Not Established N/A=Not Applicable (R)=Registered Trademark

The end of MSDS