

Material Safety Data Sheet

Material Safety Data Sheet

This MSDS adheres to the standards and regulatory requirements of China and may not meet the regulatory requirements in other countries.

SECTION I – CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Product Name in English: Difluoromethane

Synonyms: HFC-32, R-32

Formula: CH₂F₂

Supplier: Jinhua Slihe Chemical Co., Ltd

Address: No.2777 Binhong West Road, Jinhua, Zhejiang, China

Postcode: 321000

Telephone: +86-579-82881765

Telefax: +86-579-82881765

Emergency Telephone Number: +86-579-82881765

SECTION II – COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Nature: (Pure) Substance.

Chemical Name: Difluoromethane.

Concentration: >=99.90%

CAS-No.: 75-10-5.

SECTION III – HAZARDS IDENTIFICATION

Emergency Overview

OSHA Hazards

Flammable Gas, Target Organ Effect

Target Organs

Damage to the Heart

HMIS Classification

Health Hazard: 0

Chronic Health Hazard: *

Flammability: 4

Physical hazards: 3

NFPA Rating

Health Hazard: 0

Fire: 4

Reactivity Hazard: 0

Potential Health Effects

Inhalation May be harmful if inhaled. May cause respiratory tract irritation.

Skin May be harmful if absorbed through skin. May cause skin irritation.

Material Safety Data Sheet

Eyes May cause eye irritation.
Ingestion May be harmful if swallowed.

SECTION IV – FIRST AID MEASURES**General advice**

Move out of dangerous area.

If inhaled

If breathed in, move person into fresh air. If not breathing give artificial respiration

In case of skin contact

Wash off with soap and plenty of water.

In case of eye contact

Flush eyes with water as a precaution.

If swallowed

Never give anything by mouth to an unconscious person. Rinse mouth with water.

SECTION V – FIRE FIGHTING MEASURES**Flammable properties**

Flash point no data available

Ignition temperature no data available

Suitable extinguishing media

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

Special protective equipment for fire-fighters

Wear self-contained breathing apparatus for fire fighting if necessary.

SECTION VI – ACCIDENTAL RELEASE MEASURES**Personal precautions**

Avoid breathing vapors, mist or gas.

Environmental precautions

Do not let product enter drains.

Methods for cleaning up

Wipe up with absorbent material (e.g. cloth, fleece).

SECTION VII – HANDLING AND STORAGE**Handling**

Normal measures for preventive fire protection.

Storage

Keep container tightly closed in a dry and well-ventilated place.

Contents under pressure.

SECTION VIII – EXPOSURE CONTROLS/PERSONAL PROTECTION

Components with workplace control parameters

Material Safety Data Sheet

Components	CAS-No.	Value	Control parameters	update	basis
Difluoromethane	75-10-5	TWA	1,000ppm		China. Workplace Environmental Exposure Levels (WEEL)

Personal protective equipment**Respiratory protection**

Respiratory protection is not required. Where protection is desired, use multi-purpose combination or type AXBEK (EN 14387) respirator cartridges. Use respirators and components tested and approved under appropriate government standards.

Hand protection

For prolonged or repeated contact use protective gloves.

Eye protection

Face shield and safety glasses.

Hygiene measures

General industrial hygiene practice.

SECTION IX – PHYSICAL & CHEMICAL PROPERTIES**Appearance**

Form gaseous

Safety data

PH no data available

Melting point -136 °C (-213 °F) - lit.

Boiling point -51.6 °C (-60.9 °F) - lit.

Flash point no data available

Ignition temperature no data available

Lower explosion limit no data available

Upper explosion limit no data available

Density 1.1 g/mL at 25 °C (77 °F)

Water solubility no data available

SECTION X – STABILITY AND REACTIVITY**Storage stability**

Stable under recommended storage conditions.

Materials to avoid

Sodium/sodium oxides, Potassium, Calcium, Alkali metals

Hazardous decomposition products

Hazardous decomposition products formed under fire conditions. - Carbon oxides, Hydrogen fluoride

SECTION XI – TOXICOLOGICAL INFORMATION

Material Safety Data Sheet**Acute toxicity**

LC50 Inhalation - rat - 4 h - 1,890,000 mg/m³

LC50 Inhalation - mouse - 1,810,000 mg/m³

Remarks: Behavioral: Change in motor activity (specific assay). Behavioral: Ataxia. Respiratory disorder

Irritation and corrosion

No data available

Sensitization

No data available

Chronic exposure

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

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

Signs and Symptoms of Exposure

Narcosis, Exposure to large amounts can cause damage to the heart.

Potential Health Effects

Inhalation May be harmful if inhaled. May cause respiratory tract irritation.

Skin May be harmful if absorbed through skin. May cause skin irritation.

Eyes May cause eye irritation.

Ingestion May be harmful if swallowed.

Target Organs Damage to the heart.

Additional Information

RTECS: PA8537500

SECTION XII – ECOLOGICAL INFORMATION**Elimination information (persistence and degradability)**

No data available

Eco toxicity effects

No data available

Further information on ecology

No data available.

SECTION XIII – DISPOSAL CONSIDERATIONS**Product**

Burn in a chemical incinerator equipped with an afterburner and scrubber but exert extra care in igniting as this.

Material Safety Data Sheet

Material is highly flammable. Observe all federal, state, and local environmental regulations.

Contact a licensed professional waste disposal service to dispose of this material.

Contaminated packaging

Dispose of as unused product.

SECTION XIV – TRANSPORT INFORMATION**DOT (US)**

UN-Number: 3252 Class: 2.1

Proper shipping name: Difluoromethane

Marine pollutant: No

Poison Inhalation Hazard: No

IMDG

UN-Number: 3252 Class: 2.1

EMS-No: F-D, S-U

Proper shipping name: DIFLUOROMETHANE

Marine pollutant: No

IATA

UN-Number: 3252 Class: 2.1

Proper shipping name: Difluoromethane

IATA Passenger: Not permitted for transport

SECTION XV – REGULATORY INFORMATION**OSHA Hazards**

Flammable Gas, Target Organ Effect

DSL Status

All components of this product are on the Canadian DSL list.

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

Fire Hazard, Chronic Health Hazard

Massachusetts Right to Know Components

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

Pennsylvania Right to Know Components

	CAS-No.
Difluoromethane	75-10-5

New Jersey Right to Know Components

	CAS-No.
Difluoromethane	75-10-5

Material Safety Data Sheet**California Prop. 65 Components**

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

SECTION XVI – OTHER INFORMATION**Further information**

Copyright Zibo Feiyuan Chemical Co., Ltd granted to make unlimited paper copies for internal use only. 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. Zibo Feiyuan Chemical Co., shall not be held liable for any damage resulting from handling or from contact with the above product. See reverse side of invoice or packing slip for additional terms and conditions of sale.

Department: Foreign Trade Dept.; Environment, Safety and Quality Management Dept.
Jinhua Slihe Chemical Co., Ltd.

Issuing Date: 2017/11/15

Revision Date: 2022/11/14

The information given corresponds to the current state of our knowledge and experience of the product, and is not exhaustive. It is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification.

End of Document