

MATERIAL SAFETY DATA SHEET

SECTION 1 : CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Product Name	: Difluoromethanesulfonyl chloride
Synonyms	: Chloro(difluoromethyl) sulfone, difluoromethanesulfonic acid chloride, difluoromethylsulfonyl chloride, Difluoromethnesulphonyl chloride
Manufacturer/Supplier Name	: M/s GUJARAT FLUORO CHEMICALS LIMITED
Address	: Survey No 16/3, 26, 27, Ranjitnagar Pin-389 380, Tal. Ghoghamba, Dist. Panchmahals, Gujarat, India
Business Phone	: +91 – 2678 – 248107, 248152
Business Fax	: +91 – 2678 – 248153
Web Site	: www.gfl.co.in

SECTION 2 : HAZARDS IDENTIFICATION

2.1 Classification of the substance or mixture

Classification in accordance with Regulation (EC) No 1272/2008 on classification, labelling and packaging of substances and mixtures, as amended.

Flammable liquids (Category 2)

Skin corrosion	: Category 1B
H314	: Causes severe skin burns and eye damage.
Acyte Toxicity	: Category 1
H330	: Fatal if inhaled.

2.2 Label elements

Labelling accordance with Regulation (EC) No 1272/2008 on classification, labelling and packaging of substances and mixtures, as amended.

Hazard label for supply / use required.

Hazardous components which must be listed on the label:

. Difluoromethanesulfonyl chloride



Signal word

: Danger

Hazard statements

- H225 : Highly flammable liquid and vapour.
 H314 : Causes severe skin burns and eye damage.
 H330 : Fatal if inhaled.

Precautionary statements

- P280 : Wear protective gloves/ protective clothing/ eye protection/ face protection.
 P284 : Wear respiratory protection.
 P301+P330+P331 : IF SWALLOWED: Rinse mouth. Do NOT Induce vomiting.
 P303+P361+P353 : IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water / shower.
 P305 + P351 + P338 : IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
 P310 : Immediately call a POISON CENTER / doctor/ physician.
 P501 : Dispose of contents/container in accordance with local regulation.

2.3 Other hazards -- No other hazards known.

SECTION 3 : COMPOSITION, INFORMATION ON INGREDIENTS

3.1 Substances**Chemical nature**

CAS No. : 1512-30-7

EINECS-No. : 216-150-7

Hazardous components

Hazard statements according to Regulation (EC) No. 1272/2008

Name	CAS-No./EC-No/REACH Reg. No.	Classification	Conc. (%)
		Regulation (EC) No. 1272/2008	
Difluoromethanesulfonyl chloride	1512-30-7 216-150-7	Skin Corr. 1B,H314 Acute Tox. 1, H330	>=98

SECTION 4 : FIRST AID MEASURES

Eye Contact:

Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician.

Skin Contact:

Take off contaminated clothing and shoes immediately. Wash off with soap and plenty of water.

Consult a physician.

Inhalation:

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

 **SECTION 5 : FIRE FIGHTING MEASURES**

Extinguishing media

Suitable extinguishing media

Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide. Use extinguishing media appropriate for surrounding fire.

Special hazards arising from the substance or mixture

Carbon oxides, Sulphur oxides, Hydrogen chloride gas, Hydrogen fluoride

Advice for firefighters

Wear self contained breathing apparatus for fire fighting if necessary.

Further information

Use water spray to cool unopened containers.

 **SECTION 6 : ACCIDENTAL RELEASE MEASURES**

Personal precautions, protective equipment and emergency procedures

Use personal protective equipment. Avoid breathing vapors, mist or gas. Ensure adequate ventilation.

Remove all sources of ignition. Evacuate personnel to safe areas. Beware of vapours accumulating to form explosive concentrations. Vapours can accumulate in low areas.

Environmental precautions

Prevent further leakage or spillage if safe to do so. Do not let product enter drains.

Methods and materials for containment and cleaning up

Contain spillage, and then collect with an electrically protected vacuum cleaner or by wet-brushing and place in container for disposal according to local regulations (see section 13).

 **SECTION – 7 : HANDLING AND STORAGE SECTION**

Precautions for safe handling

Avoid inhalation of vapour or mist.

Keep away from sources of ignition - No smoking. Take measures to prevent the build up of electrostatic charge.

Conditions for safe storage, including any incompatibilities

Store in cool place. 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, Moisture sensitive.

Specific end uses

no data available

SECTION 8 : EXPOSURE CONTROLS, PERSONAL PROTECTION

8.1 Control parameters

Components with workplace control parameters

8.2 Exposure controls

Appropriate engineering controls

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

Personal protective equipment

Eye/face protection

Tightly fitting safety goggles. Faceshield (8-inch minimum). Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).

Skin 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.

The selected protective gloves have to satisfy the specifications of EU Directive 89/686/EEC and the standard EN 374 derived from it.

Body Protection

Complete suit protecting against chemicals, Flame retardant antistatic protective clothing, The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

Respiratory protection

Where risk assessment shows air-purifying respirators are appropriate use a full-face respirator with multi-purpose combination (US) or type ABEK (EN 14387) respirator cartridges as a backup to engineering controls. If the respirator is the sole means of protection, use a full-face supplied air respirator. Use respirators and components tested and approved under appropriate Government standards such as NIOSH (US) or CEN (EU).

SECTION 9 : PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties

Form:	: liquid, clear.
Colour:	: Colourless to light yellow.
Flash point:	: >73°C
Boiling Point:	: 95 to 99 °C
Density:	: 1.696 g/cm ³ at 20 C.

SECTION 10 : STABILITY AND REACTIVITY

10.1 Reactivity

Reactivity: No data Available.

10.2 Chemical stability

Chemical stability: Stable under normal conditions.

10.3 Possibility of hazardous reactions

No data Available

10.4 Conditions to avoid

Conditions to avoid: Heat. Light.

10.5 Incompatible materials

Materials to avoid: Water, Strong Bases.Oxidizing Agent, Alcohol.

10.6 Hazardous decomposition products

Hazardous decomposition products:

Other decomposition products - No data available

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

SECTION – 11 : TOXICOLOGICAL INFORMATION

11.1 Information on toxicological effects

Acute toxicity	: LD50 (Rat) > 2.000 mg/kg
Acute inhalation toxicity	: No data available
Acute dermal toxicity	: No data available
Skin irritation	: Corrosive (Rabbit)
Eye irritation	: Risk of serious damage to eye

SECTION 12 : ECOLOGICAL INFORMATION

12.1 Toxicity :

Toxicity to fish : No data available

Toxicity to aquatic invertebrates : No data available

12.2 Persistence and degradability

Biodegradability : Not readily biodegradable

Stability in water : No data available

12.3 Bioaccumulation :

Bioaccumulation : Does not bioaccumulate

12.4 Mobility in soil

Mobility in soil : No data available

12.5 Results of PBT and vPvB assessment

This substance is not considered to be persistent , bioaccumulative and toxic (PBT). This substance is not considered to be very persistent and very bioaccumulative (vPvB).

12.6 Other adverse effects

Additional ecological information : The product decomposes spontaneously in water. Ecological data therefore refers only to the effects of the decomposition products.

SECTION 13 : DISPOSAL CONSIDERATIONS

13.1 Waste treatment methods

Product

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

as this material is highly flammable. Offer surplus and non-recyclable solutions to a licensed disposal company.

Contaminated packaging

Dispose of as unused product.

SECTION 14 : TRANSPORT INFORMATION

ADR/RID/ADSN

14.1 UN number : 3389

14.2 Proper shipping name TOXIC BY INHALATION LIQUID , CORROSIVE , N.O.S.
(DIFLUOROMETHANESULPHONYL CHLORIDE)

14.3 Transport hazard class (es) 6.1(8)

14.4 Packing group : I

14.5 Environm. Hazardous Mark : NO

Hazard no. : 668

Tunnel Code : C/D

This classification is in principle not valid for carriage by tank vessel on inland waterways. Please refer to the manufacturer for further information.

IMDG

14.1 UN number : 3389

14.2 Proper shipping name : TOXIC BY INHALATION LIQUID, CORROSIVE, N.O.S.
(DIFLUOROMETHANESUPHONYL CHLORIDE)

14.3 Transport hazard class(es) 6.1(8)

14.4 Packing group : I

14.5 Marine pollutant : NO

Segregation group according to : IMDG SEGREGATION GROUP 1 - ACID

IATA : (DIFLUOROMETAHNESULPHONYL CHLORIED)

14.1-14.5 Not applicable . Transport not permitted.

14.6 Special precautions for user

See sections 6 to 8 of this Safety data Sheet

14.7 Transport in bulk according to Annex II of MARPOL and the IBC Code

No transport in bulk according to the IBC Code.

SECTION 15 : REGULATORY INFORMATION

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture

This safety datasheet complies with the requirements of Regulation (EC) No. 1907/2006.

15.2 Chemical safety assessment

For this product a chemical safety assessment was not carried out

SECTION 16 : ADDITIONAL INFORMATION

Further information:

MSDS Preparation Date:

06/01/2016 @ 14.30 hrs

Last Updated :

25/02/2019 @ 16.30 hrs

Legal 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. Gujarat Fluorochemicals Limited - India shall not be held liable for any damage resulting from handling or from contact with the above product.