



## Safety Data Sheet

### 1. Identification of the substance/mixture and of the company/undertaking

**Product identifier:**

Product name: 4,4-Difluoro-1-[(3-fluorophenyl)methyl]cyclohexane-1-carboxylic acid

Product code (SDS NO): PK01660E-2

**Relevant identified uses of the substance or mixture and uses advised against**

Research and Development

**Details of the supplier of the safety data sheet**

Manufacturer/Supplier: KISHIDA CHEMICAL CO., LTD.

Address: 3-1, Honmachibashi, Chuo-ku, Osaka, JAPAN

Division: Chemical Safety Management Department

Telephone number: +81-6-6946-8061

FAX: +81-6-6946-1607

### 2. Hazards identification

**GHS classification and label elements of the product****Classification of the substance or mixture**

(Note) GHS classification without description: Not classified/Classification not possible

**Label elements**

No GHS label element

No Signal word

**Specific adverse human health effects**

See "11. Toxicological Information".

### 3. Composition/information on ingredients

**Mixture/Substance selection:**

Substance

Ingredient name	Content (%)	CAS No.	ENCS	Chemical formula
4,4-Difluoro-1-[(3-fluorophenyl)methyl]cyclohexane-1-carboxylic acid	-	1389315-16-5	-	C <sub>14</sub> H <sub>15</sub> F <sub>3</sub> O <sub>2</sub>

### 4. First-aid measures

**Descriptions of first-aid measures****IF INHALED**

Remove person to fresh air and keep comfortable for breathing.

Call a POISON CENTER or doctor/physician if you feel unwell.

**IF ON SKIN (or hair)**

Take off immediately all contaminated clothing. Rinse skin with water/shower.

If skin irritation or rash occurs: Get medical advice/attention.

**IF IN EYES**

Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

If eye irritation persists: Get medical advice/attention.

**IF SWALLOWED**



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Rinse mouth.

Call a POISON CENTER or doctor/physician if you feel unwell.

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## 5. Fire-fighting measures

### Extinguishing media

#### Suitable extinguishing media

Use appropriate extinguishing media suitable for surrounding facilities.

#### Unsuitable extinguishing media

Unsuitable extinguishing media data is not available.

### Specific hazards arising from the substance or mixture

Fire may produce irritating, corrosive and/or toxic gases.

Runoff from fire control or dilution water may cause pollution.

See "10.Stability and Reactivity".

### Advice for firefighters

#### Specific fire-fighting measures

Evacuate non-essential personnel to safe area.

#### Special protective equipment and precautions for fire-fighters

Wear fire resistant or flame retardant clothing.

Wear protective gloves/protective clothing/eye protection/face protection.

Firefighters should wear self-contained breathing apparatus with a full facepiece operated in the positive pressure mode.

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## 6. Accidental release measures

### Personnel precautions, protective equipment and emergency procedures

Keep unauthorized personnel away.

Ventilate area until material pick up is complete.

Wear proper protective equipment.

### Environmental precautions

Prevent spills from entering sewers, watercourses, low areas or rivers. To be careful not discharged to the environment without being properly handled waste water contaminated.

### Methods and materials for containment and cleaning up

Sweep up, place in a bag and hold for waste disposal.

### Preventive measures for secondary accident

Collect spillage.

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## 7. Handling and storage

### Precautions for safe handling

#### Preventive measures

##### (Exposure Control for handling personnel)

Do not breathe dust/fume/gas/mist/vapors/spray.

##### (Protective measures against fire and explosion)

Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.

##### (Exhaust/ventilator)

Exhaust/ventilator should be available.

##### (Safety treatments)

Avoid contact with skin.

Avoid contact with eyes.

#### Safety Measures

Wear protective gloves/protective clothing/eye protection/face protection.

Wash hands et al thoroughly after handling.



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When using do not eat, drink or smoke.

Any incompatibilities

See "10.Stability and Reactivity".

Advice on general occupational hygiene

Wash contaminated parts thoroughly after handling.

Storage

Keep container tightly closed.

Store in a cool, dry place. Do not store in direct sunlight.

Storage in accordance with local/national regulation.

Container and packaging materials for safe handling

Use closed unbreakable containers.

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## 8. Exposure controls/personal protection

Control parameters

Control value and concentration standard value are not available in ISHA.

Exposure controls

Appropriate engineering controls

Do not use in areas without adequate ventilation.

Eye wash station should be available.

Washing facilities should be available.

Individual protection measures

Recommend to use protective equipment in conformity with the standards.

Use appropriate protective equipment in accordance with local/national regulation.

Respiratory protection

Wear respiratory protection (dust-proof mask/gas mask). Select chemical cartridge corresponding to type of gases when using a gas mask.

Hand protection

Wear impervious protective glove.

Eye protection

Wear eye/face protection. Wear safety goggles in cases gas is generated.

Skin and body protection

Wear protective clothing.

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## 9. Physical and Chemical Properties

Information on basic physical and chemical properties

Physical state, Color: off-white solid.

Odor is not available.

Melting point/Freezing point data is not available.

Boiling point or initial boiling point data is not available.

Boiling range data is not available.

Flammability (gases, liquids and solids) data is not available.

Lower and upper explosion limit/flammability limit data is not available.

Flash point data is not available.

Auto-ignition temperature data is not available.

Decomposition temperature data is not available.

pH data is not available.

Kinematic viscosity data is not available.

Solubility:

Solubility in water data is not available.

n-Octanol/water partition coefficient data is not available.

Vapor pressure data is not available.

Density and/or relative density data is not available.



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Relative vapor density (Air=1) data is not available.

No Particle characteristics data is not available.

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## 10. Stability and Reactivity

### Reactivity

N.A.

### Chemical stability

Stable under normal storage/handling conditions.

### Possibility of hazardous reactions

N.A.

### Conditions to avoid

Contact with incompatible materials.

Contact with fire source.

### Incompatible materials

Strong oxidizing agents

### Hazardous decomposition products

Carbon oxides, Fluorine, Hydrogen fluoride

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## 11. Toxicological Information

### Information on toxicological effects

Acute toxicity data is not available.

### Irritant properties

Skin corrosion/irritation data is not available.

Serious eye damage/irritation data is not available.

Allergenic and sensitizing effects data is not available.

Mutagenic effects data is not available.

Carcinogenic effects data is not available.

Reproductive toxicity data is not available.

### STOT

STOT-single exposure data is not available.

STOT-repeated exposure data is not available.

Aspiration hazard data is not available.

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## 12. Ecological Information

### Ecotoxicity

Ecotoxicity data is not available.

### Persistence and degradability

Persistence and degradability data is not available.

### Bioaccumulative potential

Bioaccumulative potential data is not available.

### Mobility in soil

Mobility in soil data is not available.

### Other adverse effects

Ozone depleting chemical data is not available.

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## 13. Disposal considerations

Description of waste residues and information on their safe handling and methods of disposal, including the disposal of any contaminated packaging

### Waste treatment methods

Dispose of contents/container as industrial waste. Accordance with local/national



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regulation.

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#### 14. Transport Information

UN Number or ID Number : Not regulated  
IMDG Code (International Maritime Dangerous Goods Regulations)  
UN Number or ID Number : Not regulated  
IATA (Dangerous Goods Regulations)  
UN Number or ID Number : Not regulated  
Environmental hazards  
Marine pollutants (yes/no) : no

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#### 15. Regulatory Information

Other regulatory information  
Ensure this material in compliance with federal requirements and ensure conformity to local regulations.

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#### 16. Other information

##### References and sources for data

Globally Harmonized System of classification and labelling of chemicals, UN  
Recommendations on the TRANSPORT OF DANGEROUS GOODS 22nd edit., 2021 UN  
IMDG Code, 2022 Edition (Incorporating Amendment 41-22)  
IATA Dangerous Goods Regulations (65th Edition) 2024  
2020 EMERGENCY RESPONSE GUIDEBOOK (US DOT)  
2024 TLVs and BEIs. (ACGIH)  
JIS Z 7252 : 2019  
JIS Z 7253 : 2019  
2023 Recommendation on TLVs (JSOH)  
Supplier's data/information

##### General Disclaimer

©KISHIDA CHEMICAL CO., LTD.  
Unauthorized translation or modification is prohibited.  
Please provide SDS to customers for selling or transferring.  
All chemicals have unknown hazard. Handle the product with care.  
This data sheet was created based on the information we currently have and may be revised according to new information. In addition, the precautions apply only to normal handling, and in the case of special handling, please make adequate countermeasure to maintain your safety.  
The data given here is based on current knowledge and experience. The purpose of this Safety Data Sheet is to describe the products in terms of their safety requirements. The data does not signify any warranty with regard to the products' properties.  
The GHS classification data given here is based on current Japan official data (NITE published in 2022).