# **Material Safety Data Sheet**

Version 4.0 Revision Date 03/14/2010 Print Date 03/31/2011

# 1. PRODUCT AND COMPANY IDENTIFICATION

Product name : 5-Fluoro-2-methylbenzoyl chloride

Product Number : 654779 Brand : Aldrich

Company : Sigma-Aldrich

3050 Spruce Street SAINT LOUIS MO 63103

USA

Telephone : +18003255832 Fax : +18003255052 Emergency Phone # : (314) 776-6555

## 2. HAZARDS IDENTIFICATION

# **Emergency Overview**

#### **OSHA Hazards**

Combustible Liquid, Corrosive

### Other hazards which do not result in classification

Lachrymator.

### GHS Label elements, including precautionary statements

Pictogram

Signal word Danger

Hazard statement(s)

H227 Combustible liquid

H303 May be harmful if swallowed.

H314 Causes severe skin burns and eye damage.

Precautionary statement(s)

P280 Wear protective gloves/protective clothing/eye protection/face protection.

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 or doctor/physician.

**HMIS Classification** 

Health hazard: 3 Flammability: 2 Physical hazards: 0

**NFPA Rating** 

Health hazard: 3 Fire: 2 Reactivity Hazard: 0

### **Potential Health Effects**

**Inhalation** May be harmful if inhaled. Material is extremely destructive to the tissue of the mucous

membranes and upper respiratory tract.

**Skin** May be harmful if absorbed through skin. Causes skin burns.

**Eyes** Causes eye burns.

#### 3. COMPOSITION/INFORMATION ON INGREDIENTS

Formula :  $C_8H_6CIFO$ Molecular Weight : 172.58 g/mol

CAS-No.	EC-No.	Index-No.	Concentration
5-Fluoro-2-methylbenzoyl chloride			
21900-39-0	-	-	-

#### 4. FIRST AID MEASURES

#### **General advice**

Consult a physician. Show this safety data sheet to the doctor in attendance. Move out of dangerous area.

#### If inhaled

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

#### In case of skin contact

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

#### In case of eye contact

Continue rinsing eyes during transport to hospital. Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician.

### If swallowed

Do NOT induce vomiting. Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.

#### 5. FIRE-FIGHTING MEASURES

### 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.

### **6. ACCIDENTAL RELEASE MEASURES**

#### Personal precautions

Use personal protective equipment. Avoid breathing vapors, mist or gas. Ensure adequate ventilation. Evacuate personnel to safe areas.

## **Environmental precautions**

Do not let product enter drains.

# Methods and materials for containment and cleaning up

Soak up with inert absorbent material and dispose of as hazardous waste. Keep in suitable, closed containers for disposal.

# 7. HANDLING AND STORAGE

# 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

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.

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### 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Contains no substances with occupational exposure limit values.

### Personal protective equipment

# **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).

### Hand protection

Handle with gloves.

### Eye protection

Tightly fitting safety goggles. Faceshield (8-inch minimum).

### Skin and body protection

Choose body protection according to the amount and concentration of the dangerous substance at the work place.

### Hygiene measures

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

# 9. PHYSICAL AND CHEMICAL PROPERTIES

# **Appearance**

Form liquid

Colour colourless

### Safety data

pH no data available

Melting point no data available

Boiling point 108 °C (226 °F) at 32 hPa (24 mmHg) - lit.

Flash point 86.6 °C (187.9 °F)
Ignition temperature no data available
Lower explosion limit no data available
Upper explosion limit no data available

Density 1.27 g/cm3 at 25 °C (77 °F)

Water solubility no data available Partition coefficient: log Pow: 2.105

n-octanol/water

# 10. STABILITY AND REACTIVITY

#### **Chemical stability**

Stable under recommended storage conditions.

### Conditions to avoid

Avoid moisture.

#### Materials to avoid

Strong oxidizing agentsStrong oxidizing agents

# **Hazardous decomposition products**

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

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### 11. TOXICOLOGICAL INFORMATION

### **Acute toxicity**

no data available

### Skin corrosion/irritation

no data available

### Serious eye damage/eye irritation

no data available

### Respiratory or skin sensitization

no data available

#### Germ cell mutagenicity

no data available

#### Carcinogenicity

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.

### Reproductive toxicity

no data available

# Specific target organ toxicity - single exposure (GHS)

no data available

### Specific target organ toxicity - repeated exposure (GHS)

no data available

# **Aspiration hazard**

no data available

Ingestion

### Potential health effects

**Inhalation** May be harmful if inhaled. Material is extremely destructive to the tissue of the mucous

membranes and upper respiratory tract.

May be harmful if swallowed. Causes burns.

**Skin** May be harmful if absorbed through skin. Causes skin burns.

**Eyes** Causes eye burns.

# Signs and Symptoms of Exposure

Material is extremely destructive to tissue of the mucous membranes and upper respiratory tract, eyes, and skin., spasm, inflammation and edema of the larynx, spasm, inflammation and edema of the bronchi, pneumonitis, pulmonary edema, burning sensation, Cough, wheezing, laryngitis, Shortness of breath, Headache, Nausea

# **Additional Information**

### 12. ECOLOGICAL INFORMATION

#### **Toxicity**

no data available

### Persistence and degradability

no data available

# **Bioaccumulative potential**

no data available

# Mobility in soil

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no data available

#### PBT and vPvB assessment

no data available

#### Other adverse effects

no data available

#### 13. DISPOSAL CONSIDERATIONS

#### **Product**

This combustible material may be burned in a chemical incinerator equipped with an afterburner and scrubber. 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.

# 14. TRANSPORT INFORMATION

DOT (US)

UN-Number: 3265 Class: 8 Packing group: II

Proper shipping name: Corrosive liquid, acidic, organic, n.o.s. (5-Fluoro-2-methylbenzoyl chloride)

Marine pollutant: No

Poison Inhalation Hazard: No

**IMDG** 

UN-Number: 3265 Class: 8 Packing group: II EMS-No: F-A, S-B

Proper shipping name: CORROSIVE LIQUID, ACIDIC, ORGANIC, N.O.S. (5-Fluoro-2-methylbenzoyl chloride)

Marine pollutant: No

IATA

UN-Number: 3265 Class: 8 Packing group: II

Proper shipping name: Corrosive liquid, acidic, organic, n.o.s. (5-Fluoro-2-methylbenzoyl chloride)

### 15. REGULATORY INFORMATION

### **OSHA Hazards**

Combustible Liquid, Corrosive

#### **DSL Status**

This product contains the following components that are not on the Canadian DSL nor NDSL lists.

CAS-No.

5-Fluoro-2-methylbenzoyl chloride

21900-39-0

### **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, Acute 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. 21900-39-0 **Revision Date** 

5-Fluoro-2-methylbenzoyl chloride

New Jersey Right To Know Components

CAS-No.

Revision Date

5-Fluoro-2-methylbenzoyl chloride

21900-39-0

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# California Prop. 65 Components

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

### **16. OTHER INFORMATION**

## **Further information**

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