

## SAFETY DATA SHEET

Version 6.0  
Revision Date 05/28/2017  
Print Date 09/21/2019

---

**1. PRODUCT AND COMPANY IDENTIFICATION****1.1 Product identifiers**

Product name : 4-(Chlorosulfonyl)phenyl isocyanate  
Product Number : 317438  
Brand : Aldrich  
CAS-No. : 6752-38-1

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

Identified uses : Laboratory chemicals, Synthesis of substances

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

Company : Sigma-Aldrich Inc.  
3050 Spruce Street  
ST. LOUIS MO 63103  
UNITED STATES  
Telephone : +1 314 771-5765  
Fax : +1 800 325-5052

**1.4 Emergency telephone number**

Emergency Phone # : +1-703-527-3887

---

**2. HAZARDS IDENTIFICATION****2.1 Classification of the substance or mixture****GHS Classification in accordance with 29 CFR 1910 (OSHA HCS)**

Skin corrosion (Category 1B), H314  
Eye irritation (Category 2A), H319  
Respiratory sensitisation (Category 1), H334  
Skin sensitisation (Category 1), H317  
Specific target organ toxicity - single exposure (Category 3), Respiratory system, H335

For the full text of the H-Statements mentioned in this Section, see Section 16.

**2.2 GHS Label elements, including precautionary statements**

Pictogram



Signal word

Danger

Hazard statement(s)

H314 Causes severe skin burns and eye damage.  
H317 May cause an allergic skin reaction.  
H319 Causes serious eye irritation.  
H334 May cause allergy or asthma symptoms or breathing difficulties if inhaled.  
H335 May cause respiratory irritation.

|                            |   |
|----------------------------|---|
| Precautionary statement(s) |   |
| P260                       | Do not breathe dust or mist.  |
| P264                       | Wash skin thoroughly after handling.  |
| P271                       | Use only outdoors or in a well-ventilated area.   |
| P272                       | Contaminated work clothing should not be allowed out of the workplace.  |
| P280                       | Wear protective gloves/ protective clothing/ eye protection/ face protection.   |
| P285                       | In case of inadequate ventilation wear respiratory protection.  |
| P301 + P330 + P331         | IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.  |
| P303 + P361 + P353         | IF ON SKIN (or hair): Remove/ Take off immediately all contaminated clothing. Rinse skin with water/ shower.  |
| P304 + P340 + P310         | IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. Immediately call a POISON CENTER or doctor/ physician. |
| P305 + P351 + P338         | IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.                        |
| P333 + P313                | If skin irritation or rash occurs: Get medical advice/ attention.   |
| P337 + P313                | If eye irritation persists: Get medical advice/ attention.  |
| P342 + P311                | If experiencing respiratory symptoms: Call a POISON CENTER/doctor.  |
| P363                       | Wash contaminated clothing before reuse.  |
| P403 + P233                | Store in a well-ventilated place. Keep container tightly closed.  |
| P405                       | Store locked up.  |
| P501                       | Dispose of contents/ container to an approved waste disposal plant.   |

### 2.3 Hazards not otherwise classified (HNOC) or not covered by GHS

Lachrymator.

---

## 3. COMPOSITION/INFORMATION ON INGREDIENTS

### 3.1 Substances

|                  |   |   |
|------------------|---|---|
| Synonyms         | : | 4-Isocyanatobenzenesulfonyl chloride              |
| Formula          | : | C <sub>7</sub> H <sub>4</sub> ClNO <sub>3</sub> S |
| Molecular weight | : | 217.63 g/mol                                      |
| CAS-No.          | : | 6752-38-1   |
| EC-No.           | : | 229-812-5   |

#### Hazardous components

| Component                                    | Classification  | Concentration |
|--|---|---------------|
| <b>p-Isocyanatobenzenesulphonyl chloride</b> |   |               |
|  | Skin Corr. 1B; Eye Irrit. 2A;<br>Resp. Sens. 1; Skin Sens. 1;<br>STOT SE 3; H314, H317,<br>H334, H335 | <= 100 %      |

For the full text of the H-Statements mentioned in this Section, see Section 16.

---

## 4. FIRST AID MEASURES

### 4.1 Description of first aid measures

#### General advice

Consult a physician. Show this safety data sheet to the doctor in attendance.

#### 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**

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

**If swallowed**

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

**4.2 Most important symptoms and effects, both acute and delayed**

The most important known symptoms and effects are described in the labelling (see section 2.2) and/or in section 11

**4.3 Indication of any immediate medical attention and special treatment needed**

No data available

---

**5. FIREFIGHTING MEASURES****5.1 Extinguishing media****Suitable extinguishing media**

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

**5.2 Special hazards arising from the substance or mixture**

Carbon oxides, Nitrogen oxides (NOx), Sulphur oxides, Hydrogen chloride gas

**5.3 Advice for firefighters**

Wear self-contained breathing apparatus for firefighting if necessary.

**5.4 Further information**

No data available

---

**6. ACCIDENTAL RELEASE MEASURES****6.1 Personal precautions, protective equipment and emergency procedures**

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

For personal protection see section 8.

**6.2 Environmental precautions**

Do not let product enter drains.

**6.3 Methods and materials for containment and cleaning up**

Pick up and arrange disposal without creating dust. Sweep up and shovel. Keep in suitable, closed containers for disposal.

**6.4 Reference to other sections**

For disposal see section 13.

---

**7. HANDLING AND STORAGE****7.1 Precautions for safe handling**

Avoid contact with skin and eyes. Avoid formation of dust and aerosols. Further processing of solid materials may result in the formation of combu formation should be taken into consideration before additional processing

Provide appropriate exhaust ventilation at places where dust is formed.

For precautions see section 2.2.

**7.2 Conditions for safe storage, including any incompatibilities**

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

Moisture sensitive. Keep in a dry place.

**7.3 Specific end use(s)**

Apart from the uses mentioned in section 1.2 no other specific uses are stipulated

---

**8. EXPOSURE CONTROLS/PERSONAL PROTECTION****8.1 Control parameters****Components with workplace control parameters**

Contains no substances with occupational exposure limit values.

## 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

Face shield and safety glasses 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.

#### Body Protection

Complete suit protecting against chemicals, 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 (EN 143) respirator cartridges as a backup to engineering controls. If th full-face supplied air respirator. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

#### Control of environmental exposure

Do not let product enter drains.

---

## 9. PHYSICAL AND CHEMICAL PROPERTIES

### 9.1 Information on basic physical and chemical properties

- |   |   |
|---|---|
| a) Appearance                                   | Form: powder<br>Colour: white                         |
| b) Odour  | No data available                                     |
| c) Odour Threshold                              | No data available                                     |
| d) pH   | No data available                                     |
| e) Melting point/freezing point                 | Melting point/range: 55 - 58 °C (131 - 136 °F) - lit. |
| f) Initial boiling point and boiling range      | 130 °C (266 °F) at 1 hPa - lit.                       |
| g) Flash point                                  | ( )No data available                                  |
| h) Evaporation rate                             | No data available                                     |
| i) Flammability (solid, gas)                    | No data available                                     |
| j) Upper/lower flammability or explosive limits | No data available                                     |
| k) Vapour pressure                              | No data available                                     |
| l) Vapour density                               | No data available                                     |
| m) Relative density                             | No data available                                     |
| n) Water solubility                             | No data available                                     |
| o) Partition coefficient: n-octanol/water       | No data available                                     |
| p) Auto-ignition temperature                    | No data available                                     |
| q) Decomposition temperature                    | No data available                                     |
| r) Viscosity                                    | No data available                                     |

- s) Explosive properties      No data available
- t) Oxidizing properties      No data available

## 9.2 Other safety information

No data available

---

## 10. STABILITY AND REACTIVITY

### 10.1 Reactivity

No data available

### 10.2 Chemical stability

Stable under recommended storage conditions.

### 10.3 Possibility of hazardous reactions

No data available

### 10.4 Conditions to avoid

No data available

### 10.5 Incompatible materials

Strong oxidizing agents

### 10.6 Hazardous decomposition products

Hazardous decomposition products formed under fire conditions. - Carbon oxides, Nitrogen oxides (NOx), Sulphur oxides, Hydrogen chloride gas

Other decomposition products - No data available

In the event of fire: see section 5

---

## 11. TOXICOLOGICAL INFORMATION

### 11.1 Information on toxicological effects

#### Acute toxicity

No data available(p-Isocyanatobenzenesulphonyl chloride)

Inhalation: No data available(p-Isocyanatobenzenesulphonyl chloride)

Dermal: No data available(p-Isocyanatobenzenesulphonyl chloride)

No data available(p-Isocyanatobenzenesulphonyl chloride)

#### Skin corrosion/irritation

No data available(p-Isocyanatobenzenesulphonyl chloride)

#### Serious eye damage/eye irritation

No data available(p-Isocyanatobenzenesulphonyl chloride)

#### Respiratory or skin sensitisation

#### Germ cell mutagenicity

No data available(p-Isocyanatobenzenesulphonyl chloride)

#### 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(p-Isocyanatobenzenesulphonyl chloride)

No data available(p-Isocyanatobenzenesulphonyl chloride)

**Specific target organ toxicity - single exposure**

Inhalation - May cause respiratory irritation.(p-Isocyanatobenzenesulphonyl chloride)

**Specific target organ toxicity - repeated exposure**

No data available

**Aspiration hazard**

No data available(p-Isocyanatobenzenesulphonyl chloride)

**Additional Information**

RTECS: Not available

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(p-Isocyanatobenzenesulphonyl chloride)

---

**12. ECOLOGICAL INFORMATION****12.1 Toxicity**

No data available

**12.2 Persistence and degradability**

No data available

**12.3 Bioaccumulative potential**

No data available

**12.4 Mobility in soil**

No data available(p-Isocyanatobenzenesulphonyl chloride)

**12.5 Results of PBT and vPvB assessment**

PBT/vPvB assessment not available as chemical safety assessment not required/not conducted

**12.6 Other adverse effects**

No data available

---

**13. DISPOSAL CONSIDERATIONS****13.1 Waste treatment methods****Product**

Offer surplus and non-recyclable solutions to a licensed disposal company.

**Contaminated packaging**

Dispose of as unused product.

---

**14. TRANSPORT INFORMATION****DOT (US)**

UN number: 3261

Class: 8

Packing group: II

Proper shipping name: Corrosive solid, acidic, organic, n.o.s. (p-Isocyanatobenzenesulphonyl chloride)

Poison Inhalation Hazard: No

**IMDG**

UN number: 3261

Class: 8

Packing group: II

EMS-No: F-A, S-B

Proper shipping name: CORROSIVE SOLID, ACIDIC, ORGANIC, N.O.S. (p-Isocyanatobenzenesulphonyl chloride)

**IATA**

UN number: 3261

Class: 8

Packing group: II

Proper shipping name: Corrosive solid, acidic, organic, n.o.s. (p-Isocyanatobenzenesulphonyl chloride)

---

**15. REGULATORY INFORMATION****SARA 302 Components**

No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

**SARA 313 Components**

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.

**Massachusetts Right To Know Components**

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

**Pennsylvania Right To Know Components**

|                                       | CAS-No.   | Revision Date |
|---------------------------------------|-----------|---------------|
| p-Isocyanatobenzenesulphonyl chloride | 6752-38-1 |               |

**New Jersey Right To Know Components**

|                                       | CAS-No.   | Revision Date |
|---------------------------------------|-----------|---------------|
| p-Isocyanatobenzenesulphonyl chloride | 6752-38-1 |               |

**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****Full text of H-Statements referred to under sections 2 and 3.**

|      |  |
|------|--|
| H314 | Causes severe skin burns and eye damage.                                   |
| H317 | May cause an allergic skin reaction.                                       |
| H319 | Causes serious eye irritation.   |
| H334 | May cause allergy or asthma symptoms or breathing difficulties if inhaled. |
| H335 | May cause respiratory irritation.  |

**HMIS Rating**

|                        |   |
|------------------------|---|
| Health hazard:         | 3 |
| Chronic Health Hazard: |   |
| Flammability:          | 0 |
| Physical Hazard        | 0 |

**NFPA Rating**

|                    |   |
|--------------------|---|
| Health hazard:     | 3 |
| Fire Hazard:       | 0 |
| Reactivity Hazard: | 0 |

**Further information**

Copyright 2016 Sigma-Aldrich Co. LLC. License 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. Sigma-Aldrich Corporation and its Affiliates shall not be held liable for any damage resulting from handling or from contact with the above product. See [www.sigma-aldrich.com](http://www.sigma-aldrich.com) and/or the reverse side of invoice or packing slip for additional terms and conditions of sale.

**Preparation Information**

Sigma-Aldrich Corporation  
Product Safety – Americas Region  
1-800-521-8956  
Version: 6.0

Revision Date: 05/28/2017

Print Date: 09/21/2019