

Revision Date 06-Feb-2012

Revision Number 2

## SECTION 1. IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

### Product Identifier

**Product Description:** 4-Bromo-2-chlorobenzenesulfonyl chloride  
**Cat No.** 371430000; 371430010; 371430050

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

**Recommended Use** Laboratory chemicals  
**Uses advised against** No Information available

### Details of the supplier of the safety data sheet

#### Company

Acros Organics BVBA  
 Janssen Pharmaceuticaaan 3a  
 2440 Geel, Belgium

**E-mail address** begel.sdsdesk@thermofisher.com

### Emergency Telephone Number

For information in the US, call: 001-800-ACROS-01  
 For information in Europe, call: +32 14 57 52 11

Emergency Number, Europe: +32 14 57 52 99  
 Emergency Number, US: 001-201-796-7100

CHEMTREC Phone Number, US: 001-800-424-9300  
 CHEMTREC Phone Number, Europe: 001-703-527-3887

## SECTION 2. HAZARDS IDENTIFICATION

### Classification of the substance or mixture REGULATION (EC) No 1272/2008

Skin Corrosion/irritation	Category 1 B
Serious Eye Damage/Eye Irritation	Category 1

### Classification according to EU Directives 67/548/EEC or 1999/45/EC

For the full text of the R-phrases and H-Statements mentioned in this Section, see Section 16

**Symbol(s)** C - Corrosive  
**R-phrases(s)** R34 - Causes burns

### Label Elements

4-Bromo-2-chlorobenzenesulfonyl chloride

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## SECTION 2. HAZARDS IDENTIFICATION



**Signal Word**

**Danger**

### Hazard Statements

H314 - Causes severe skin burns and eye damage

### Precautionary Statements - EU (§28, 1272/2008)

P301 + P330 + P331 - IF SWALLOWED: rinse mouth. Do NOT induce vomiting

P280 - Wear 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

### Other Hazards

No information available.

## SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Component	EC-No.	Weight %	CAS-No	67/548/EEC Classification	CLP Classification - Regulation (EC) No 1272/2008	REACH No.
4-Bromo-2-chlorobenzenesulfonyl chloride 351003-52-6		97	351003-52-6	C; R34	Skin Corr. 1B (H314)	-

For the full text of the R-phrases and H-Statements mentioned in this Section, see Section 16

## SECTION 4. FIRST AID MEASURES

### Description of first aid measures

#### Eye Contact

Immediate medical attention is required. Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes.

#### Skin Contact

Wash off immediately with soap and plenty of water while removing all contaminated clothes and shoes. Immediate medical attention is required.

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Ingestion	Do not induce vomiting. Never give anything by mouth to an unconscious person. Drink plenty of water. Call a physician immediately. If possible drink milk afterwards.
Inhalation	Remove from exposure, lie down. Move to fresh air. If breathing is difficult, give oxygen. If not breathing, give artificial respiration. Immediate medical attention is required.
Notes to Physician	Treat symptomatically

**SECTION 5. FIRE-FIGHTING MEASURES****Extinguishing media****Suitable Extinguishing Media**

Water spray. Carbon dioxide (CO<sub>2</sub>). Dry chemical. chemical foam.

**Extinguishing media which must not be used for safety reasons**

No information available.

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

Thermal decomposition can lead to release of irritating gases and vapors

**Advice for fire-fighters**

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

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

Ensure adequate ventilation

**Environmental precautions**

Prevent further leakage or spillage if safe to do so

**Methods and material for containment and cleaning up**

Soak up with inert absorbent material (e.g. sand, silica gel, acid binder, universal binder, sawdust). Prevent product from entering drains. Keep in suitable, closed containers for disposal.. Do not flush into surface water or sanitary sewer system.

**SECTION 7. HANDLING AND STORAGE****Precautions for Safe Handling**

Do not breathe dust. Do not breathe vapors or spray mist. Do not get in eyes, on skin, or on clothing. Use only in area provided with appropriate exhaust ventilation.

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

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Keep in a dry, cool and well-ventilated place. Keep container tightly closed. Corrosives area.

## Specific End Uses

## SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

### Control parameters

#### Exposure limits

This product, as supplied, does not contain any hazardous materials with occupational exposure limits established by the region specific regulatory bodies.

#### Biological limit values

This product, as supplied, does not contain any hazardous materials with biological limits established by the region specific regulatory bodies.

#### Derived No Effect Level (DNEL)

No information available.

#### Predicted No Effect Concentration (PNEC)

No information available.

### Exposure controls

#### Engineering Measures

Ensure adequate ventilation, especially in confined areas Ensure that eyewash stations and safety showers are close to the workstation location

#### Personal protective equipment

##### Eye Protection

Goggles

##### Hand Protection

Protective gloves

##### Skin and body protection

Wear appropriate protective gloves and clothing to prevent skin exposure

##### Respiratory Protection

Follow the OSHA respirator regulations found in 29 CFR 1910.134 or European Standard EN 149. Use a NIOSH/MSHA or European Standard EN 149 approved respirator if exposure limits are exceeded or if irritation or other symptoms are experienced

#### Hygiene Measures

Handle in accordance with good industrial hygiene and safety practice

#### Environmental exposure controls

No information available.

## SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

#### Physical State

Solid

#### Appearance

Yellow

#### pH

No information available.

#### Vapor Density

No information available.

#### Boiling Point/Range

No information available.

#### Melting Point/Range

75 - 80°C / 167 - 176°F

#### Flash Point

No information available.

#### Autoignition Temperature

No information available.

#### Molecular Formula

C6 H3 Br Cl2 O2 S

#### Molecular Weight

289.96

## SECTION 10. STABILITY AND REACTIVITY

### Reactivity

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## Chemical Stability

Stable under normal conditions. Moisture sensitive.

## Possibility of Hazardous Reactions

<b>Hazardous Polymerization</b>	No information available.
<b>Hazardous Reactions .</b>	No information available.

## Conditions to Avoid

Incompatible products, Exposure to moist air or water.

## Incompatible Materials

Strong oxidizing agents, Strong bases.

## Hazardous Decomposition Products

Hydrogen chloride gas. Nitrogen oxides (NO<sub>x</sub>). Carbon monoxide (CO). Carbon dioxide (CO<sub>2</sub>). Sulfur oxides.

# SECTION 11. TOXICOLOGICAL INFORMATION

## Information on Toxicological Effects

### Acute Toxicity

<b>Product Information</b>	No acute toxicity information is available for this product
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### **Component Information**

### Chronic Toxicity

<b>Carcinogenicity</b>	There are no known carcinogenic chemicals in this product
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<b>Sensitization</b>	No information available.
<b>Mutagenic Effects</b>	No information available
<b>Reproductive Effects</b>	No information available.
<b>Developmental Effects</b>	No information available.
<b>Target Organs</b>	No information available.
<b>Other Adverse Effects</b>	The toxicological properties have not been fully investigated.
<b>Endocrine Disruptor Information</b>	None known

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## SECTION 12. ECOLOGICAL INFORMATION

### Toxicity

#### **Ecotoxicity effects**

Do not flush into surface water or sanitary sewer system Do not allow material to contaminate ground water system

### Persistence and degradability

No information available

### Bioaccumulative potential

No information available.

### Mobility in soil

No information available.

### Results of PBT and vPvB assessment

### Other adverse effects

No information available

## SECTION 13. DISPOSAL CONSIDERATIONS

### Waste treatment methods

#### **Waste from Residues / Unused Products**

Dispose of in accordance with local regulations

#### **Contaminated Packaging**

Empty containers should be taken to local recyclers for disposal

## SECTION 14. TRANSPORT INFORMATION

### IMDG/IMO

UN-No	3261
Hazard Class	8
Subsidiary Hazard Class	8
Packing Group	II
Proper Shipping Name	CORROSIVE SOLID, ACIDIC, ORGANIC, N.O.S.

### ADR

UN-No	3261
Hazard Class	8
Packing Group	II
Proper Shipping Name	CORROSIVE SOLID, ACIDIC, ORGANIC, N.O.S.

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## SECTION 14. TRANSPORT INFORMATION

### IATA

UN-No	3261
Hazard Class	8
Subsidiary Hazard Class	8
Packing Group	II
Proper Shipping Name	CORROSIVE SOLID, ACIDIC, ORGANIC, N.O.S.*

## SECTION 15. REGULATORY INFORMATION

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

#### International Inventories

#### Legend

**TSCA** - United States Toxic Substances Control Act Section 8(b) Inventory  
**EINECS/ELINCS** - European Inventory of Existing Commercial Chemical Substances/EU List of Notified Chemical Substances  
**DSL/NDL** - Canadian Domestic Substances List/Non-Domestic Substances List  
**PICCS** - Philippines Inventory of Chemicals and Chemical Substances  
**ENCS** - Japan Existing and New Chemical Substances  
**CHINA** - China Inventory of Existing Chemical Substances  
**AICS** - Inventory of Chemical Substances  
**KECL** - Existing and Evaluated Chemical Substances

#### Chemical Safety Assessment

## SECTION 16. OTHER INFORMATION

### Full text of R-phrases referred to under sections 2 and 3

R34 - Causes burns

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Revision Summary Not applicable

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

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**SECTION 16. OTHER INFORMATION****Disclaimer**

The information provided on this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guide for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered as a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other material or in any process, unless specified in the text.

End of Safety Data Sheet