



# SAFETY DATA SHEET

Revision Date 24-Nov-2010

Revision Number 1

## 1. PRODUCT AND COMPANY IDENTIFICATION

### Product Identifier

**Product Description:** 4-Nitrobenzenesulfonyl chloride  
**Cat No.** 415850000; 415850050; 415850250; 415851000

### 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** [bege1.sdsdesk@thermofisher.com](mailto:bege1.sdsdesk@thermofisher.com)

#### Emergency Telephone Number

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

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

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

## 2. HAZARDS IDENTIFICATION

### Classification of the substance or mixture

#### REGULATION (EC) No 1272/2008

Skin Corrosion / irritation	Category 1 B
Chronic aquatic toxicity	Category 3

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

For the full text of the R phrases mentioned in this Section, see Section 16

#### Symbol(s)

C - Corrosive

#### R -phrase(s)

R14 - Reacts violently with water  
R29 - Contact with water liberates toxic gas  
R34 - Causes burns

#### Risk Combination Phrases

R52/53 - Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment

4-Nitrobenzenesulfonyl chloride

Revision Date 24-Nov-2010

**2. HAZARDS IDENTIFICATION**

Label Elements



Signal Word

**Danger**

**Hazard Statements**

H412 - Harmful to aquatic life with long lasting effects  
 H314 - Causes severe skin burns and eye damage  
 EUH029 - Contact with water liberates toxic gas  
 EUH014 - Reacts violently with water

**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  
 P273 - Avoid release to the environment  
 P402 + P404 - Store in a dry place. Store in a closed container

**Other Hazards**

No information available.

**3. COMPOSITION/INFORMATION ON INGREDIENTS**

Component	EC No.	Weight %	CAS-No	Classification	GHSCAS	REACH Reg. No.
Benzenesulfonyl chloride, 4-nitro-98-74-8	EEC No. 202-697-9	95	98-74-8	R14 R29 C; R34 R52/53	Skin Corr. 1B (H314) Aquatic Chronic 3 (H412) (EUH014) (EUH029)	-

For the full text of the R phrases mentioned in this Section, see Section 16

**4. FIRST AID MEASURES**

4-Nitrobenzenesulfonyl chloride

Revision Date 24-Nov-2010

**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 removing all contaminated clothes and shoes Immediate medical attention is required

**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

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

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

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

Water

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

Contact with water liberates toxic gas Water reactive Produce flammable gases on contact with water

**Advice for fire-fighters**

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

**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). Avoid dust formation. Keep in suitable and closed containers for disposal.

**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 Keep under nitrogen

**4-Nitrobenzenesulfonyl chloride**
**Revision Date 24-Nov-2010**
**Conditions for safe storage, including any incompatibilities**

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

**Specific End Uses**
**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.

**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.

**9. PHYSICAL AND CHEMICAL PROPERTIES**
**Physical State**

Powder, Solid

**Appearance**

Dark yellow

**pH**

No information available.

**Vapor Density**

No information available.

**Boiling Point/Range**

143 - 144°C / 289.4 - 291.2°F @ 2 hPa

**Melting Point/Range**

75 - 80°C / 167 - 176°F

**Flash Point**

No information available.

**Water Solubility**

Insoluble

**Molecular Formula**

C6 H4 Cl N O4 S

**Molecular Weight**

221.62

**10. STABILITY AND REACTIVITY**
**Reactivity**
**Chemical Stability**

Stable under normal conditions. heat sensitive. Moisture sensitive.

## 4-Nitrobenzenesulfonyl chloride

Revision Date 24-Nov-2010

**Possibility of Hazardous Reactions****Hazardous Polymerization**

Hazardous polymerization does not occur.

**Hazardous Reactions**

No information available.

**Conditions to Avoid**

Temperatures above 71°C, 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.**11. TOXICOLOGICAL INFORMATION****Information on Toxicological Effects****Acute Toxicity****Product Information**

No acute toxicity information is available for this product

**Component Information****Chronic Toxicity****Carcinogenicity**

There are no known carcinogenic chemicals in this product

**Sensitization**

No information available.

**Mutagenic Effects**

No information available

**Reproductive Effects**

No information available.

**Developmental Effects**

No information available.

**Target Organs**

No information available.

**Other Adverse Effects**

The toxicological properties have not been fully investigated.

**Endocrine Disruptor Information**

None known

**12. ECOLOGICAL INFORMATION****Toxicity****Ecotoxicity effects**

Contains no substances known to be hazardous to the environment or that are not degradable in waste water treatment plants

**Persistence and degradability**

Not readily biodegradable

**Bioaccumulative potential**

No information available.

**Mobility in soil**

**4-Nitrobenzenesulfonyl chloride**

Revision Date 24-Nov-2010

**12. ECOLOGICAL INFORMATION**

No information available.

**Results of PBT and vPvB assessment**
**Other adverse effects**

No information available

**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 for local recycling, recovery or waste disposal

**14. TRANSPORT INFORMATION**
**IMDG/IMO**

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

**ADR**

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

**IATA**

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

**15. REGULATORY INFORMATION**
**Safety, health and environmental regulations/legislation specific for the substance or mixture**
**International Inventories**

Component	EINECS	ELINCS	NLP	TSCA	DSL	NDSL	PICCS	ENCS	CHINA	AICS	KECL
Benzenesulfonyl chloride, 4-nitro-	202-697-9	-		X	X	-	X	X	X	-	KE-25974 X

**Legend**

**4-Nitrobenzenesulfonyl chloride**

Revision Date 24-Nov-2010

**TSCA** - United States Toxic Substances Control Act Section 8(b) Inventory  
**EINECS/ELINCS** - European Inventory Lists  
**DSL/NDSL** - 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****16. OTHER INFORMATION****Text of R phrases mentioned in Section 2-3**

R14 - Reacts violently with water  
R29 - Contact with water liberates toxic gas  
R34 - Causes burns  
R52/53 - Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment

**Revision Date** 24-Nov-2010  
**Revision Summary** Not applicable

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

**Disclaimer**

The information provided on this SDS 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**