

Revision Date 16-Nov-2010

Revision Number 3

## 1. PRODUCT AND COMPANY IDENTIFICATION

**Product Identifier**

**Product Description:** alpha-Toluenesulfonyl fluoride  
**Cat No.** 215740000; 215740010; 215740050; 215740100  
**Synonyms** Phenylmethylsulfonyl fluoride; Benzenemethanesulfonyl fluoride; PMSF

**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: 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**

Acute oral toxicity	Category 3
Skin Corrosion / irritation	Category 1
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 mentioned in this Section, see Section 16

**Symbol(s)** T - Toxic  
**R -phrase(s)** R25 - Toxic if swallowed  
 R34 - Causes burns

**Label Elements**

## 2. HAZARDS IDENTIFICATION

**Signal Word****Danger****Hazard Statements**

H318 - Causes serious eye damage

H301 - Toxic if swallowed

H314 - Causes severe skin burns and eye damage

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

P301 + P310 - IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician

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.

## 3. COMPOSITION/INFORMATION ON INGREDIENTS

Component	EC No.	Weight %	CAS-No	Classification	GHSCLAS	REACH Reg. No.
Benzenemethanesulfonyl fluoride 329-98-6	EEC No. 206- 350-2	99	329-98-6	T; R25 C; R34	Skin Corr. 1B (H314) Acute Tox. 3 (H301)	-

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

## 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 Call a physician immediately

**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 Do not use a solid water stream as it may scatter and spread fire**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

**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**

Sweep up or vacuum up spillage and collect in suitable container 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

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

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

**Component**

Benzenemethanesulfonyl fluoride

European Union	The United Kingdom	France	Belgium	Spain
		VME: 2.5 mg/m <sup>3</sup>		

**Component**

Benzenemethanesulfonyl fluoride

Italy	Portugal	The Netherlands	Finland	Denmark
	TWA: 2.5 mg/m <sup>3</sup>			

**Component**

Austria	Switzerland	Poland	Norway	Ireland

Component	Austria	Switzerland	Poland	Norway	Ireland
Benzenemethanesulfonyl fluoride				TWA: 0.6 mg/m <sup>3</sup>	

**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**

Solid

**Appearance**

White

**odor**

odorless

**pH**

No information available.

**Boiling Point/Range**

No information available.

**Melting Point/Range**

90 - 94°C / 194 - 201.2°F

**Flash Point**

No information available.

**Water Solubility**

hydrolysis

**Molecular Formula**

C7 H7 F O2 S

**Molecular Weight**

174.19

## 10. STABILITY AND REACTIVITY

**Reactivity**

**Chemical Stability**

Stable under normal conditions. Moisture sensitive.

**Possibility of Hazardous Reactions**

**Hazardous Polymerization**

Hazardous polymerization does not occur.

**Hazardous Reactions .**

May react with metals and lead to the formation of flammable hydrogen gas..

**Conditions to Avoid**

Incompatible products, Exposure to moist air or water.

**Incompatible Materials**

Acids, Strong oxidizing agents, Strong bases.

**Hazardous Decomposition Products**

Carbon monoxide (CO). Carbon dioxide (CO<sub>2</sub>). Sulfur oxides. Gaseous hydrogen fluoride (HF).

**11. TOXICOLOGICAL INFORMATION****Information on Toxicological Effects****Acute Toxicity**

**Product Information** Product does not present an acute toxicity hazard based on known or supplied information

**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. See actual entry in RTECS for complete information

**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**

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

**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**

## 14. TRANSPORT INFORMATION

**IMDG/IMO**

**UN-No** 2923  
**Hazard Class** 8  
**Subsidiary Hazard Class** 6.1  
**Packing Group** II

**ADR**

**UN-No** 2923  
**Hazard Class** 8  
**Subsidiary Class** 6.1  
**Packing Group** II

**IATA**

**UN-No** 2923  
**Hazard Class** 8  
**Subsidiary Hazard Class** 6.1  
**Packing Group** II

## 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
Benzenemethanesulfonyl fluoride	206-350-2	-		X	X	-	-	-	X	-	-

**Legend**

**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**

R25 - Toxic if swallowed

R34 - Causes burns

Revision Date 16-Nov-2010

Revision Summary Not applicable

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

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<b>16. OTHER INFORMATION</b>
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**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