Material Safety Data Sheet
Zinc trifluoromethanesulfonate, 98%

MSDS# 99010

Section 1 - Chemical Product and Company Identification

MSDS Name: Zinc trifluoromethanesulfonate, 98%
Catalog Numbers: AC317090000, AC317090100
Synonyms: None.

Company Identification:
Acros Organics BVBA
Janssen Pharmaceuticals 3a
2440 Geel, Belgium

Company Identification: (USA)
Acros Organics
One Reagent Lane
Fair Lawn, NJ 07410

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

Section 2 - Composition, Information on Ingredients

CAS#:
54010-75-2
Chemical Name:
Zinc trifluoromethanesulfonate
%:
98.0
EINECS#:
258-922-6

Hazard Symbols: C

Risk Phrases: 34

Section 3 - Hazards Identification

EMERGENCY OVERVIEW

Danger! Corrosive. Hygroscopic (absorbs moisture from the air). The toxicological properties of this material have not been fully investigated. Causes eye and skin burns. May cause severe respiratory tract irritation with possible burns. May cause severe digestive tract irritation with possible burns. Target Organs: None known.

Potential Health Effects
Eye: Causes eye burns.
Skin: Causes skin burns.
Ingestion: May cause severe and permanent damage to the digestive tract. Causes gastrointestinal tract burns. The toxicological properties of this substance have not been fully investigated.
Inhalation: Causes chemical burns to the respiratory tract. The toxicological properties of this substance have not been fully investigated.
Chronic: No information found.

Section 4 - First Aid Measures
Eyes: Flush eyes with plenty of water for at least 15 minutes, occasionally lifting the upper and lower eyelids. Get medical aid immediately. Do NOT allow victim to rub eyes or keep eyes closed. Extensive irrigation with water is required (at least 30 minutes).

Skin: Get medical aid. Flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Wash clothing before reuse. Destroy contaminated shoes.

Ingestion: Do not induce vomiting. If victim is conscious and alert, give 2-4 cupfuls of milk or water. Never give anything by mouth to an unconscious person. Get medical aid immediately.

Inhalation: Remove from exposure and move to fresh air immediately. If breathing is difficult, give oxygen. Get medical aid. Do NOT use mouth-to-mouth resuscitation. If breathing has ceased apply artificial respiration using oxygen and a suitable mechanical device such as a bag and a mask.

Section 5 - Fire Fighting Measures

General Information: As in any fire, wear a self-contained breathing apparatus in pressure-demand, MSHA/NIOSH (approved or equivalent), and full protective gear. During a fire, irritating and highly toxic gases may be generated by thermal decomposition or combustion.

Extinguishing Media: Use agent most appropriate to extinguish fire. Use water spray, dry chemical, carbon dioxide, or appropriate foam.

Autoignition Temperature: Not available.
Flash Point: Not available
Explosion Limits: Not available
Explosion Limits: Not available
NFPA Rating: NFPA Rating:

Section 6 - Accidental Release Measures

General Information: Use proper personal protective equipment as indicated in Section 8.

Spills/Leaks: Clean up spills immediately, observing precautions in the Protective Equipment section. Sweep up or absorb material, then place into a suitable clean, dry, closed container for disposal. Avoid generating dusty conditions. Provide ventilation.

Section 7 - Handling and Storage

Handling: Wash thoroughly after handling. Use with adequate ventilation. Minimize dust generation and accumulation. Do not get in eyes, on skin, or on clothing. Keep container tightly closed. Do not ingest or inhale. Use with adequate ventilation. Discard contaminated shoes.

Storage: Keep container closed when not in use. Store in a tightly closed container. Store in a cool, dry, well-ventilated area away from incompatible substances. Corrosives area. Store protected from moisture.

Section 8 - Exposure Controls, Personal Protection

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>ACGIH</th>
<th>NIOSH</th>
<th>OSHA - Final PELs</th>
</tr>
</thead>
<tbody>
<tr>
<td>Zinc trifluoromethanesulfonate</td>
<td>None listed</td>
<td>None listed</td>
<td>None listed</td>
</tr>
</tbody>
</table>

OSHA Vacated PELs: Zinc trifluoromethanesulfonate: None listed

Engineering Controls: Facilities storing or utilizing this material should be equipped with an eyewash facility and a safety shower. Use adequate ventilation to keep airborne concentrations low.

Exposure Limits

Personal Protective Equipment

Eyes: Wear appropriate protective eyeglasses or chemical safety goggles as described by OSHA's eye and face protection regulations in 29 CFR 1910.133 or European Standard EN166.
Skin: Wear appropriate protective gloves to prevent skin exposure.

Clothing: Wear appropriate protective clothing to prevent skin exposure.

Respirators: A respiratory protection program that meets OSHA's 29 CFR 1910.134 and ANSI Z88.2 requirements or European Standard EN 149 must be followed whenever workplace conditions warrant respirator use.

Section 9 - Physical and Chemical Properties

Physical State: Solid
Color: white
Odor: Not available
pH: Not available
Vapor Pressure: Not available
Vapor Density: Not available
Evaporation Rate: Not available
Viscosity: Not available
Boiling Point: Not available
Freezing/Melting Point: Not available
Decomposition Temperature: Not available
Solubility in water: Not available
Specific Gravity/Density:
Molecular Formula: C2F6O6S2Zn
Molecular Weight: 363.51

Section 10 - Stability and Reactivity

Chemical Stability: Stability unknown.

Conditions to Avoid: Incompatible materials, dust generation, exposure to moist air or water.

Incompatibilities with Other Materials: Strong oxidizing agents, strong acids, strong bases, moisture.

Hazardous Decomposition Products: Carbon monoxide, oxides of sulfur, oxides of sulfur, carbon dioxide, hydrogen fluoride gas.

Hazardous Polymerization: Has not been reported.

Section 11 - Toxicological Information

RTECS#: CAS# 54010-75-2: None listed
LD50/LC50: RTECS: Not available.

Carcinogenicity: Zinc trifluoromethanesulfonate - Not listed as a carcinogen by ACGIH, IARC, NTP, or CA Prop 65.

Section 12 - Ecological Information

Other: No information available.

Section 13 - Disposal Considerations

Dispose of in a manner consistent with federal, state, and local regulations.

Section 14 - Transport Information

US DOT
Shipping Name: Please contact Fisher Scientific for shipping information
Hazard Class:
UN Number:
Packing Group:
Canada TDG
Shipping Name: Not available
Hazard Class:
UN Number:
Packing Group:

Section 15 - Regulatory Information

European/International Regulations
European Labeling in Accordance with EC Directives

Hazard Symbols: C

Risk Phrases:
  R 34 Causes burns.

Safety Phrases:
  S 25 Avoid contact with eyes.
  S 28A After contact with skin, wash immediately with plenty of water.
  S 36/37/39 Wear suitable protective clothing, gloves and eye/face protection.
  S 37 Wear suitable gloves.
  S 45 In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).

WGK (Water Danger/Protection)
  CAS# 54010-75-2: Not available

Canada
  CAS# 54010-75-2 is listed on Canada's NDSL List
  Canadian WHMIS Classifications: E
  This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations and the MSDS contains all of the information required by those regulations.
  CAS# 54010-75-2 is not listed on Canada's Ingredient Disclosure List.

US Federal
  TSCA
  CAS# 54010-75-2 is listed on the TSCA Inventory.

Section 16 - Other Information
  MSDS Creation Date: 4/05/1999
  Revision #5 Date 7/20/2009

The information above is believed to be accurate and represents the best information currently available to us. However, we make no warranty of merchantibility or any other warranty, express or implied, with respect to such information, and we assume no liability resulting from its use. Users should make their own investigations to determine the suitability of the information for their particular purposes. In no event shall the company be liable for any claims, losses, or damages of any third party or for lost profits or any special, indirect, incidental, consequential, or exemplary damages howsoever arising, even if the company has been advised of the possibility of such damages.