E-mail: gcat@matthey.com

www.alfa-chemcat.com

Safety Data Sheet according to 1907/2006/EC, Article 31

Printing date 24.08.2010 Revision: 24.08.2010

1 Identification of substance

**Product details** 

Trade name Zinc trifluoromethanesulfonate

Stock number:

Manufacturer/Supplier: Alfa Aesar GmbH & Co.KG

Benzstrasse 3 D-76185 Karlsruhe / Germany

Product safety department. Informing department:

Giftnotruf Universität Mainz / Poison Information Center Mainz www.giftinfo.uni-mainz.de Telefon:+49(0)6131/19240 **Emergency information:** 

2 Hazards identification

Hazard designation:

C Corrosive

Danger

R 34 Causes burns.

Information pertaining to particular dangers for man and environment GHS label elements

H314 - Causes severe skin burns and eye damage. Prevention:

Response:

H314 - Causes severe skin burns and eye damage.
P260 Do not breathe dust/fume/gas/mist/vapours/spray.
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.
P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P405 Store locked up.

Storage: Disposal: P501 Dispose of contents/container in accordance with local/regional/national/international regulations.

3 Composition/information on ingredients

Chemical characterization:

Designation: (CAS#)
Identification number(s): Zinc trifluoromethanesulfonate (CAS# 54010-75-2), 100% 258-922-6

**EINECS Number:** 

4 First aid measures After inhalation Supply fresh air. If required, provide artificial respiration. Keep patient warm. Consult doctor if symptoms

persist. Seek immediate medical advice. After skin contact

Instantly wash with water and soap and rinse thoroughly. Seek immediate medical advice.

After eye contact After swallowing Rinse opened eye for several minutes under running water. Then consult doctor. Seek immediate medical advice.

5 Fire fighting measures

Suitable extinguishing agents Special hazards caused by the material, its products of combustion or flue gases:

CO2, extinguishing powder or water jet. Fight larger fires with water jet or alcohol-resistant foam.

Can be released in case of fire: Hydrogen fluoride (HF) Sulphur oxides (SOx) Carbon monoxide and carbon dioxide

Wear self-contained breathing apparatus. Protective equipment: Wear full protective suit.

6 Accidental release measures

Person-related safety precautions:

Measures for environmental protection: Measures for cleaning/collecting:

Additional information:

Wear protective equipment. Keep unprotected persons away. Ensure adequate ventilation

Do not allow material to be released to the environment without proper governmental permits.

Ensure adequate ventilation.

See Section 7 for information on safe handling

See section 8 for information on personal protection equipment.

See Section 13 for information on disposal.

7 Handling and storage

Handling Information for safe handling:

Keep containers tightly sealed. Store in cool, dry place in tightly closed containers. Ensure good ventilation/exhaustion at the workplace.

Information about protection against

explosions and fires:

Keep ignition sources away - Do not smoke.

Storage

Requirements to be met by storerooms and containers: Information about storage in one common

storage facility:

No special requirements.

Store away from oxidizing agents. Store away from water.

Further information about storage

conditions:

This product is hygroscopic.
Keep container tightly sealed.
Store in cool, dry conditions in well sealed containers.
Protect from humidity and keep away from water.
Store in a locked cabinet or with access restricted to technical experts or their assistants.

8 Exposure controls and personal protection

Additional information about design of

technical systems:

Properly operating chemical fume hood designed for hazardous chemicals and having an average face velocity of at least 100 feet per minute.

Components with critical values that require monitoring at the workplace: Additional information:

Not required. No data

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Personal protective equipment General protective and hygienic measures

The usual precautionary measures should be adhered to in handling the chemicals. Keep away from foodstuffs, beverages and food. Instantly remove any soiled and impregnated garments. Wash hands during breaks and at the end of the work. Avoid contact with the eyes and skin.

Use breathing protection with high concentrations.

Breathing equipment:

Safety glasses Face protection Eye protection:

**Body protection:** Protective work clothing.

9 Physical and chemical properties: **General Information** 

Form: Crystalline powder White Colour: Smell: Not determined

>300°C

Change in condition Melting point/Melting range: Boiling point/Boiling range: Sublimation temperature / start: Not determined Not determined Flash point: Not applicable Ignition temperature: Not determined

Not determined Decomposition temperature: Danger of explosion: Product is not explosive.

Critical values for explosion:

Lower: Upper: Not determined Not determined Steam pressure: Not determined

Density Not determined

Solubility in / Miscibility with Soluble Water:

10 Stability and reactivity

Thermal decomposition / conditions to be

avoided:

No decomposition if used and stored according to specifications. Water/moisture Materials to be avoided:

Bases Active metals

**Dangerous reactions:** No dangerous reactions known Dangerous products of decomposition:

Hydrogen fluoride Sulphur oxides (SOx) Carbon monoxide and carbon dioxide

Metal oxide

11 Toxicological information

Acute toxicity: Primary irritant effect: on the skin:

Corrosive effect on skin and mucous membranes. on the eye:

Sensitization:

Additional toxicological information:

Strong corrosive effect.

No sensitizing effect known.

To the best of our knowledge the acute and chronic toxicity of this substance is not fully known.

Swallowing will lead to a strong caustic effect on mouth and throat and to the danger of perforation of esophagus and stomach.

No classification data on carcinogenic properties of this material is available from the EPA, IARC, NTP, OSHA or ACGIH.

12 Ecological information:

Additional ecological information:

General notes:

Water hazard class 1 (Self-assessment): slightly hazardous for water.
Do not allow undiluted product or large quantities of it to reach ground water, water bodies or sewage system.
Do not allow material to be released to the environment without proper governmental permits.

13 Disposal considerations

Product:

Consult state, local or national regulations for proper disposal. Hand over to disposers of hazardous waste. Must be specially treated under adherence to official regulations. Recommendation

Uncleaned packagings: Recommendation:

Disposal must be made according to official regulations.

Recommended cleaning agent: Water, if necessary with cleaning agent.

14 Transport information

Land transport ADR/RID and GGVS/GGVE (cross-border/domestic)

ADR/RID-GGVS/E Class: 8 (C4) Corrosive substances.

Kemler Number: 3261 II UN-Number Packaging group:

8 3261 CORROSIVE SOLID, ACIDIC, ORGANIC, N.O.S. (Zinc trifluoromethanesulfonate) Label Designation of goods: Limited quantities (LQ)

Transport category

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**Tunnel restriction code** 

Maritime transport IMDG/GGVSea:

IMDG/GGVSea Class: 8 3261 UN Number: Label 8 II Packaging group: Marine pollutant: Segregation groups No

Acids CORROSIVE SOLID, ACIDIC, ORGANIC, N.O.S. (Zinc trifluoromethanesulfonate) Correct technical name:

Air transport ICAO-TI and IATA-DGR:



ICAO/IATA Class: UN/ID Number: 8 3261 Label 8 ||

Packaging group: Correct technical name: CORROSIVE SOLID, ACIDIC, ORGANIC, N.O.S. (Zinc trifluoromethanesulfonate)

UN "Model Regulation": UN3261, CORROSIVE SOLID, ACIDIC, ORGANIC, N.O.S., 8, II

Ε

15 Regulatory information

Designation according to EC guidelines:

Code letter and hazard designation of

product:

C Corrosive

Risk phrases: 34 Causes burns.

 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
 36/37/39 Wear suitable protective clothing, gloves and eye/face protection.
 In case of accident or if you feel unwell, seek medical advice immediately (show the label where Safety phrases:

possible).

National regulations

Employment restrictions concerning young persons must be observed. For use only by technically qualified individuals. Information about limitation of use:

Water hazard class 1 (Self-assessment): slightly hazardous for water. Water hazard class:

16 Other information:

Employers should use this information only as a supplement to other information gathered by them, and should make independent judgement of suitability of this information to ensure proper use and protect the health and safety of employees. This information is furnished without warranty, and any use of the product not in conformance with this Material Safety Data Sheet, or in combination with any other product or process, is the responsibility of the user.

Department issuing data specification sheet: Health, Safety and Environmental Department.

Abbreviations and acronyms:

Health, Safety and Environmental Department.

Zachariah Holt

ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)

RID: Règlement international concernant le transport des marchandises dangereuses par chemin de fer (Regulations Concerning the International RID: Règlement international Maritime Code for Dangerous Goods IMATA-DRIA Maritime Code for Dangerous Goods

IATA-International Air Transport Association

IATA-DRIS: Dangerous Goods Regulations by the "International Air Transport Association" (IATA)

ICAO: International Civil Aviation Organization

ICAO-TI: Technical Instructions by the "International Civil Aviation Organization" (ICAO)

GHS: Globally Harmonized System of Classification and Labelling of Chemicals

EINECS: European Inventory of Existing Commercial Chemical Substances

CAS: Chemical Abstracts Service (division of the American Chemical Society)