SIGMA-ALDRICH

SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006 Version 5.1 Revision Date 02.07.2013 Print Date 30.01.2015 GENERIC EU MSDS - NO COUNTRY SPECIFIC DATA - NO OEL DATA

SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1	Product identifiers Product name :	Trifluoromethanesulfonimide
	Product Number : Brand : REACH No. :	464635 Aldrich A registration number is not available for this substance as the substance or its uses are exempted from registration, the annual tonnage does not require a registration or the registration is envisaged for a later registration deadline.
	CAS-No. :	82113-65-3
1.2	Relevant identified uses of the substance or mixture and uses advised against	
	Identified uses : Laboratory chemicals, Manufacture of substances	
1.3	3 Details of the supplier of the safety data sheet	
	Company :	Sigma-Aldrich Chemie GmbH Riedstrasse 2 D-89555 STEINHEIM
	Telephone:Fax:E-mail address:	+49 89-6513-1444 +49 7329-97-2319 eurtechserv@sial.com
1.4	Emergency telephone number	
	Emergency Phone # :	+49 7329-97-2323
SEC	FION 2: Hazards identification	
SEC ⁻ 2.1	FION 2: Hazards identification Classification of the substan	ce or mixture
	Classification of the substan	legulation (EC) No 1272/2008
	Classification of the substan Classification according to R Skin corrosion (Category 1B),	legulation (EC) No 1272/2008
	Classification of the substan Classification according to R Skin corrosion (Category 1B), I For the full text of the H-Staten	agulation (EC) No 1272/2008 ⊣314
	Classification of the substan Classification according to R Skin corrosion (Category 1B), I For the full text of the H-Staten Classification according to E C Corrosive	Regulation (EC) No 1272/2008 H314 nents mentioned in this Section, see Section 16. SU Directives 67/548/EEC or 1999/45/EC
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contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTER or doctor/ physician.

Supplemental Hazard information (EU) EUH014 Reacts violently with water.

2.3 Other hazards - none

SECTION 3: Composition/information on ingredients

3.1 Substances

Chemical characterization		Natural product
Formula	:	C ₂ HF ₆ NO ₄ S ₂
Molecular Weight	:	281,15 g/mol
CAS-No.	:	82113-65-3

Hazardous ingredients according to Regulation (EC) No 1272/2008

Component		Classification	Concentration
1,1,1-Trifluoro-N-[(tr	ifluoromethyl)sulfonyl]-m	ethanesulfonamide	
CAS-No.	82113-65-3	Skin Corr. 1B; H314, EL	JH014 <= 100 %

Hazardous ingredients according to Directive 1999/45/EC

1,1,1-Trifluoro-N-[(trifluoromethyl)sulfonyl]-methanesulfonamide			

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

SECTION 4: First aid measures

4.1 Description of first aid measures

General advice

Consult a physician. Show this safety data sheet to the doctor in attendance.

If inhaled

If breathed in, move person into fresh air. If not breathing, give artificial respiration. Consult a physician.

In case of skin contact

Take off contaminated clothing and shoes immediately. Wash off with soap and plenty of water. Consult a physician.

In case of eye contact

Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician.

If swallowed

Do NOT induce vomiting. Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.

4.2 Most important symptoms and effects, both acute and delayed

The most important known symptoms and effects are described in the labelling (see section 2.2) and/or in section 11

4.3 Indication of any immediate medical attention and special treatment needed no data available

SECTION 5: Firefighting measures

5.1 Extinguishing media

Suitable extinguishing media Dry powder

- 5.2 Special hazards arising from the substance or mixture Carbon oxides, nitrogen oxides (NOx), Sulphur oxides, Hydrogen fluoride
- **5.3** Advice for firefighters Wear self contained breathing apparatus for fire fighting if necessary.
- 5.4 Further information no data available

SECTION 6: Accidental release measures

- 6.1 Personal precautions, protective equipment and emergency procedures Use personal protective equipment. Avoid dust formation. Avoid breathing vapours, mist or gas. Ensure adequate ventilation. Evacuate personnel to safe areas. Avoid breathing dust. For personal protection see section 8.
- 6.2 Environmental precautions Do not let product enter drains.
- **6.3** Methods and materials for containment and cleaning up Pick up and arrange disposal without creating dust. Sweep up and shovel. Do not flush with water. Keep in suitable, closed containers for disposal.
- 6.4 Reference to other sections For disposal see section 13.

SECTION 7: Handling and storage

7.1 Precautions for safe handling

Avoid formation of dust and aerosols. Provide appropriate exhaust ventilation at places where dust is formed. For precautions see section 2.2.

7.2 Conditions for safe storage, including any incompatibilities Store in cool place. Keep container tightly closed in a dry and well-ventilated place. Never allow product to get in contact with water during storage.

7.3 Specific end use(s)

A part from the uses mentioned in section 1.2 no other specific uses are stipulated

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

Components with workplace control parameters

8.2 Exposure controls

Appropriate engineering controls

Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday.

Personal protective equipment

Eye/face protection

Face shield and safety glasses Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).

Skin protection

Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands.

The selected protective gloves have to satisfy the specifications of EU Directive 89/686/EEC and the standard EN 374 derived from it.

Full contact Material: Nitrile rubber Minimum layer thickness: 0,11 mm Break through time: 480 min Material tested:Dermatril® (KCL 740 / Aldrich Z677272, Size M)

Splash contact Material: Nitrile rubber Minimum layer thickness: 0,11 mm Break through time: 480 min Material tested:Dermatril® (KCL 740 / Aldrich Z677272, Size M)

data source: KCL GmbH, D-36124 Eichenzell, phone +49 (0)6659 87300, e-mail sales@kcl.de, test method: EN374

If used in solution, or mixed with other substances, and under conditions which differ from EN 374, contact the supplier of the CE approved gloves. This recommendation is advisory only and must be evaluated by an industrial hygienist and safety officer familiar with the specific situation of anticipated use by our customers. It should not be construed as offering an approval for any specific use scenario.

Body Protection

Complete suit protecting against chemicals, Flame retardant protective clothing, The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

Respiratory protection

Where risk assessment shows air-purifying respirators are appropriate use a full-face particle respirator type N100 (US) or type P3 (EN 143) respirator cartridges as a backup to engineering controls. If the respirator is the sole means of protection, use a full-face supplied air respirator. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

Control of environmental exposure

Do not let product enter drains.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

a)	Appearance	Form: solid
b)	Odour	no data available
c)	Odour Threshold	no data available
d)	рН	no data available
e)	Melting point/freezing point	Melting point/range: 46 - 57 °C
f)	Initial boiling point and boiling range	90 - 91 °C
g)	Flash point	no data available
h)	Evapouration rate	no data available
i)	Flammability (solid, gas)	no data available
j)	Upper/lower flammability or explosive limits	no data available
k)	Vapour pressure	no data available
I)	Vapour density	no data available
m)	Relative density	1,360 g/cm3
n)	Water solubility	no data available
o)	Partition coefficient: n- octanol/water	no data available

	p)	Auto-ignition temperature	no data available
	q)	Decomposition temperature	no data available
	r)	Viscosity	no data available
	s)	Explosive properties	no data available
	t)	Oxidizing properties	no data available
9.2		ner safety information data available	
SECT	ION	10: Stability and reactiv	ity
10.1		activity data available	
10.2		emical stability ble under recommended s	storage conditions.
10.3	Possibility of hazardous reactions Reacts violently with water.		
10.4	Conditions to avoid Exposure to moisture.		
10.5	Incompatible materials Strong oxidizing agents		
10.6	Oth	zardous decomposition her decomposition product he event of fire: see section	s - no data available

SECTION 11: Toxicological information

11.1 Information on toxicological effects

Acute toxicity no data available

Skin corrosion/irritation no data available

Serious eye damage/eye irritation no data available

Respiratory or skin sensitisation no data available

Germ cell mutagenicity

no data available

Carcinogenicity

IARC: No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.

Reproductive toxicity

no data available

Specific target organ toxicity - single exposure

no data available

Specific target organ toxicity - repeated exposure no data available

Aspiration hazard no data available

Additional Information

RTECS: Not available

Material is extremely destructive to tissue of the mucous membranes and upper respiratory tract, eyes, and skin., spasm, inflammation and edema of the larynx, spasm, inflammation and edema of the bronchi, pneumonitis, pulmonary edema, burning sensation, Cough, wheezing, laryngitis, Shortness of breath, Headache, Nausea, Vomiting

SECTION 12: Ecological information

- 12.1 Toxicity no data available
- 12.2 Persistence and degradability no data available
- **12.3 Bioaccumulative potential** no data available
- **12.4 Mobility in soil** no data available
- 12.5 Results of PBT and vPvB assessment PBT/vPvB assessment not available as chemical safety assessment not required/not conducted
- 12.6 Other adverse effects

no data available

SECTION 13: Disposal considerations

13.1 Waste treatment methods

Product

Offer surplus and non-recyclable solutions to a licensed disposal company. Dissolve or mix the material with a combustible solvent and burn in a chemical incinerator equipped with an afterburner and scrubber.

Contaminated packaging

Dispose of as unused product.

SECTION 14: Transport information 14.1 **UN number** ADR/RID: 3261 IMDG: 3261 IATA: 3261 14.2 UN proper shipping name ADR/RID: CORROSIVE SOLID, ACIDIC, ORGANIC, N.O.S. (1,1,1-Trifluoro-N-[(trifluoromethyl)sulfonyl]methanesulfonamide) IMDG: CORROSIVE SOLID, ACIDIC, ORGANIC, N.O.S. (1,1,1-Trifluoro-N-[(trifluoromethyl)sulfonyl]methanesulfonamide) Corrosive solid, acidic, organic, n.o.s. (1,1,1-Trifluoro-N-[(trifluoromethyl)sulfonyl]-IATA: methanesulfonamide) 14.3 Transport hazard class(es) ADR/RID: 8 IMDG: 8 IATA: 8 14.4 Packaging group ADR/RID: I IMDG: I IATA: I **Environmental hazards** 14.5 ADR/RID: no IMDG Marine pollutant: no IATA: no 14.6 Special precautions for user no data available

SECTION 15: Regulatory information

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

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

no data available

15.2 Chemical Safety Assessment

For this product a chemical safety assessment was not carried out

SECTION 16: Other information

Full text of H-Statements referred to under sections 2 and 3.

EUH014	Reacts violently with water.
H314	Causes severe skin burns and eye damage.
Skin Corr.	Skin corrosion

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

С	Corrosive
R14	Reacts violently with water.
R34	Causes burns.

Further information

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The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. The information in this document is based on the present state of our knowledge and is applicable to the product with regard to appropriate safety precautions. It does not represent any guarantee of the properties of the product. Sigma-Aldrich Corporation and its Affiliates shall not be held liable for any damage resulting from handling or from contact with the above product. See www.sigma-aldrich.com and/or the reverse side of invoice or packing slip for additional terms and conditions of sale.