# SIGMA-ALDRICH

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SAFETY DATA SHEET

Version 5.2 Revision Date 06/26/2014 Print Date 11/10/2018

#### 1. PRODUCT AND COMPANY IDENTIFICATION 1.1 **Product identifiers** Product name 1 3,5-Difluorobenzenesulfonyl chloride Product Number 555975 Brand Aldrich CAS-No. 210532-25-5 : 1.2 Relevant identified uses of the substance or mixture and uses advised against Identified uses : Laboratory chemicals, Manufacture of substances Details of the supplier of the safety data sheet 1.3 Company Sigma-Aldrich 3050 Spruce Street SAINT LOUIS MO 63103 USA +1 800-325-5832 Telephone +1 800-325-5052 Fax 1.4 **Emergency telephone number** Emergency Phone # : +1-703-527-3887 (CHEMTREC)

## 2. HAZARDS IDENTIFICATION

# 2.1 Classification of the substance or mixture

## GHS Classification in accordance with 29 CFR 1910 (OSHA HCS) Skin corrosion (Category 1B), H314

Serious eye damage (Category 1), H318

For the full text of the H-Statements mentioned in this Section, see Section 16.

## 2.2 GHS Label elements, including precautionary statements

Pictogram

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Signal word	Danger
Hazard statement(s) H314	Causes severe skin burns and eye damage.
Precautionary statement(s) P260 P264 P280	Do not breathe dust or mist. Wash skin thoroughly after handling. Wear protective gloves/ protective clothing/ eye protection/ face protection.
P301 + P330 + P331 P303 + P361 + P353	IF SWALLOWED: rinse mouth. Do NOT induce vomiting. IF ON SKIN (or hair): Remove/ Take off immediately all contaminated clothing. Rinse skin with water/ shower.
P304 + P340	IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.
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.
P321	Specific treatment (see supplemental first aid instructions on this label).
P363	Wash contaminated clothing before reuse.
P405	Store locked up.
P501	Dispose of contents/ container to an approved waste disposal plant.

## 2.3 Hazards not otherwise classified (HNOC) or not covered by GHS - none

# **3. COMPOSITION/INFORMATION ON INGREDIENTS**

3.1	Substances		
	Formula	:	C <sub>6</sub> H <sub>3</sub> CIF <sub>2</sub> O <sub>2</sub> S
	Molecular Weight	:	212.60 g/mol
	CAS-No.	:	210532-25-5

## Hazardous components

Component	Classification	Concentration
3,5-Difluorobenzenesulfonyl chloride		
	Skin Corr. 1B; Eye Dam. 1;	-
	H314	
For the full text of the H-Statements mentioned in this	s Section see Section 16	

# 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. Move out of dangerous area.

## 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. Continue rinsing eyes during transport to hospital.

## 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

## **5. FIREFIGHTING MEASURES**

## 5.1 Extinguishing media

**Suitable extinguishing media** Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

5.2 Special hazards arising from the substance or mixture

Carbon oxides, Sulphur oxides, Hydrogen chloride gas, Hydrogen fluoride

## 5.3 Advice for firefighters

Wear self contained breathing apparatus for fire fighting if necessary.

## 5.4 Further information

no data available

## 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. Keep in suitable, closed containers for disposal.
- 6.4 **Reference to other sections** For disposal see section 13.

## 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.Normal measures for preventive fire protection. For precautions see section 2.2.

**7.2 Conditions for safe storage, including any incompatibilities** Keep container tightly closed in a dry and well-ventilated place.

Store under inert gas. Moisture sensitive.

## 7.3 Specific end use(s)

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

## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

## 8.1 Control parameters

**Components with workplace control parameters** Contains no substances with occupational exposure limit values.

## 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.

#### **Body Protection**

Complete suit protecting against chemicals, 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.

## 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	no data available
f)	Initial boiling point and boiling range	no data available
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	no data available
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
Oth	ner safety information	

no data available

# **10. STABILITY AND REACTIVITY**

## 10.1 Reactivity no data available

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**10.2** Chemical stability Stable under recommended storage conditions.

- **10.3** Possibility of hazardous reactions no data available
- **10.4** Conditions to avoid no data available
- **10.5** Incompatible materials Strong oxidizing agents
- **10.6 Hazardous decomposition products** Other decomposition products - no data available In the event of fire: see section 5

## 11. TOXICOLOGICAL INFORMATION

## 11.1 Information on toxicological effects

## Acute toxicity

no data available

Inhalation: no data available

Dermal: no data available

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.
- ACGIH: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by ACGIH.
- NTP: No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.
- OSHA: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.

## Reproductive toxicity

no data available

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

Cough, Shortness of breath, Headache, Nausea, Vomiting

# **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

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## 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

## **13. DISPOSAL CONSIDERATIONS**

## 13.1 Waste treatment methods

## Product

Offer surplus and non-recyclable solutions to a licensed disposal company. Contact a licensed professional waste disposal service to dispose of this material. 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.

## 14. TRANSPORT INFORMATION

## DOT (US)

UN number: 3261 Class: 8 Packing group: II Proper shipping name: Corrosive solid, acidic, organic, n.o.s. (3,5-Difluorobenzenesulfonyl chloride) Marine pollutant: No Poison Inhalation Hazard: No

## IMDG

UN number: 3261 Class: 8 Packing group: II EMS-No: F-A, S-B Proper shipping name: CORROSIVE SOLID, ACIDIC, ORGANIC, N.O.S. (3,5-Difluorobenzenesulfonyl chloride) Marine pollutant: No

## ΙΑΤΑ

UN number: 3261 Class: 8 Packing group: II Proper shipping name: Corrosive solid, acidic, organic, n.o.s. (3,5-Difluorobenzenesulfonyl chloride)

## **15. REGULATORY INFORMATION**

## SARA 302 Components

SARA 302: No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

## SARA 313 Components

SARA 313: This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.

## SARA 311/312 Hazards

Acute Health Hazard

## **Massachusetts Right To Know Components**

No components are subject to the Massachusetts Right to Know Act.

#### Pennsylvania Right To Know Components

3,5-Difluorobenzenesulfonyl chloride	CAS-No. 210532-25-5	Revision Date
New Jersey Right To Know Components	CAS-No.	Revision Date
3,5-Difluorobenzenesulfonyl chloride	210532-25-5	Revision Date

## California Prop. 65 Components

This product does not contain any chemicals known to State of California to cause cancer, birth defects, or any other reproductive harm.

## **16. OTHER INFORMATION**

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

Eye Dam.	Serious eye damage
H314	Causes severe skin burns and eye damage.
H318	Causes serious eye damage.
Skin Corr.	Skin corrosion
HMIS Rating	

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Health hazard:	3	
Chronic Health Hazard:		
Flammability:	0	
Physical Hazard	0	
NFPA Rating		
NFPA Rating Health hazard:	3	
-	3 0	
Health hazard:		

## Further information

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## **Preparation Information**

Sigma-Aldrich Corporation Product Safety – Americas Region 1-800-521-8956

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