# SIGMA-ALDRICH

# SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006 Version 5.2 Revision Date 02.06.2015 Print Date 23.01.2017 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	ntimony(III) chloride	
	Product Number Brand Index-No. REACH No. CAS-No.	37374 Idrich 51-001-00-8 registration number is not available for this substance as the substa its uses are exempted from registration, the annual tonnage does r equire a registration or the registration is envisaged for a later gistration deadline. 0025-91-9	
1.2	Relevant identified uses of the substance or mixture and uses advised against		
	Identified uses	aboratory chemicals, Manufacture of substances	
1.3	Details of the supplier of the safety data sheet		
	Company	igma-Aldrich Chemie GmbH iedstrasse 2 -89555 STEINHEIM	
	Telephone Fax E-mail address	49 89-6513-1444 49 7329-97-2319 urtechserv@sial.com	
1.4	Emergency telephone number		
	Emergency Phone #	300 181 7059 (CHEMTREC Deutschland) 49 (0)696 43508409 (CHEMTREC weltweit)	

## **SECTION 2: Hazards identification**

#### 2.1 Classification of the substance or mixture

Classification according to Regulation (EC) No 1272/2008 Skin corrosion (Category 1B), H314 Chronic aquatic toxicity (Category 2), H411

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

## Classification according to EU Directives 67/548/EEC or 1999/45/EC

С	Corrosive	R34
Ν	Dangerous for the	R51/53
	environment	

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

## 2.2 Label elements

Labelling according Regulation (EC) No 1272/2008
Pictogram

Signal word	Danger
Hazard statement(s) H314 H411	Causes severe skin burns and eye damage. Toxic to aquatic life with long lasting effects.
Precautionary statement(s) P273 P280	Avoid release to the environment. Wear protective gloves/ protective clothing/ eye protection/ face protection.
P303 + P361 + P353	IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.
P304 + P340 + P310	IF INHALED: Remove person to fresh air and keep comfortable for breathing. Immediately call a POISON CENTER or doctor/ physician.
P305 + P351 + P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P501	Dispose of contents/ container to an approved waste disposal plant.
Supplemental Hazard Statements	none

## 2.3 Other hazards

3.1

This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

## **SECTION 3: Composition/information on ingredients**

Substances Synonyms	:	Antimony trichloride
Formula	:	Cl <sub>3</sub> Sb
Molecular weight	:	228,12 g/mol
CAS-No.	:	10025-91-9
EC-No.	:	233-047-2
Index-No.	:	051-001-00-8

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

Component		Classification	Concentration
Antimony trichloride	•		
CAS-No.	10025-91-9	Skin Corr. 1B; Aquatic C	hronic <= 100 %
EC-No.	233-047-2	2; H314, H411	
Index-No.	051-001-00-8		

Hazardous ingredients according to Directive 1999/45/EC			
Component		Classification	Concentration
Antimony trichloride			
CAS-No. EC-No. Index-No.	10025-91-9 233-047-2 051-001-00-8	C, N, R34 - R51/53	<= 100 %

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. Aldrich - 337374 Page 2 of 8

## 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

Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

**5.2** Special hazards arising from the substance or mixture Hydrogen chloride gas, Antimony oxide

## 5.3 Advice for firefighters

Wear self-contained breathing apparatus for firefighting if necessary.

5.4 Further information No data available

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

Prevent further leakage or spillage if safe to do so. Do not let product enter drains. Discharge into the environment must be avoided.

**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.

#### **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.

Store under inert gas. Reacts violently with water. Storage class (TRGS 510): Non-combustible, corrosive hazardous materials

#### 7.3 Specific end use(s)

Apart 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, 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**

Prevent further leakage or spillage if safe to do so. Do not let product enter drains. Discharge into the environment must be avoided.

## **SECTION 9: Physical and chemical properties**

## 9.1 Information on basic physical and chemical properties

a)	Appearance	Form: crystalline Colour: white
b)	Odour	No data available
c)	Odour Threshold	No data available
d)	рН	No data available
e)	Melting point/freezing point	Melting point/range: 73,4 °C - lit.
f)	Initial boiling point and boiling range	283 °C at 1.013 hPa
g)	Flash point	Not applicable
h)	Evaporation rate	No data available
i)	Flammability (solid, gas)	No data available
j)	Upper/lower flammability or explosive limits	No data available
k)	Vapour pressure	1 hPa at 49 °C 0,28 hPa at 20 °C
I)	Vapour density	No data available
m)	Relative density	3,140 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
	<b>her safety information</b> data available	

## **SECTION 10: Stability and reactivity**

10.1	<b>Reactivity</b> No data available
10.2	Chemical stability Stable under recommended storage conditions.

- **10.3 Possibility of hazardous reactions** No data available
- **10.4 Conditions to avoid** Heat
- **10.5** Incompatible materials Strong bases, Reacts violently with water.

9.2

#### **10.6 Hazardous decomposition products** Other decomposition products - No data available In the event of fire: see section 5

## **SECTION 11: Toxicological information**

#### 11.1 Information on toxicological effects

#### Acute toxicity

LD50 Oral - Rat - 525 mg/kg

#### Skin corrosion/irritation No data available

#### Serious eye damage/eye irritation No data available

#### **Respiratory or skin sensitisation** No data available

#### Germ cell mutagenicity

Hamster Lungs Micronucleus test

Hamster Lungs Sister chromatid exchange

## 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**

Reproductive toxicity - Rat - Oral Effects on Newborn: Growth statistics (e.g., reduced weight gain).

Developmental Toxicity - Rat - Intramuscular Effects on Embryo or Fetus: Fetotoxicity (except death, e.g., stunted fetus).

#### 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: CC4900000

Cough, Shortness of breath, Headache, Nausea, Vomiting To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.

#### **SECTION 12: Ecological information**

## 12.1 Toxicity

Toxicity to fish	LC50 - Pimephales promelas (fathead minnow) - 9 mg/l - 96 h
Toxicity to daphnia and other aquatic invertebrates	LC50 - Daphnia magna (Water flea) - 10,1 mg/l - 48 h
Toxicity to algae	IC50 - Tetrahymena pyriformis, Ciliate - 6 mg/l - 36 h

12.2	Persistence and degradability         Biodegradability       Result: - Not readily biodegradable.		
12.3	Bioaccumulative potential No data available		
12.4	<b>Mobility in soil</b> No data available		
12.5			ther persistent, bioaccumulative and vels of 0.1% or higher.
12.6	Other adverse effects Toxic to aquatic life with long lasti	ng effects.	
	Toxic to aquatic life with long lasti	ng effects.	
SEC1	TION 13: Disposal considerations		
13.1	Waste treatment methods		
	<b>Product</b> 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.		
SECT	TION 14: Transport information		
14.1	<b>UN number</b> ADR/RID: 1733	IMDG: 1733	IATA: 1733
14.2	2 UN proper shipping name ADR/RID: ANTIMONY TRICHLORIDE IMDG: ANTIMONY TRICHLORIDE IATA: Antimony trichloride		
14.3	Transport hazard class(es) ADR/RID: 8	IMDG: 8	IATA: 8
14.4	Packaging group ADR/RID: II	IMDG: II	ΙΑΤΑ: ΙΙ
14.5	Environmental hazards ADR/RID: yes	IMDG Marine pollutant: yes	IATA: no
14.6	Special precautions for user No data available		
SECT	TION 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

## 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.

Aquatic Chronic	Chronic aquatic toxicity
H314	Causes severe skin burns and eye damage.
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H411	Toxic to aquatic life with long lasting effects.
Skin Corr.	Skin corrosion

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

С	Corrosive
Ν	Dangerous for the environment
R34	Causes burns.
R51/53	Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic
	environment.

## **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.sigmaaldrich.com and/or the reverse side of invoice or packing slip for additional terms and conditions of sale.