

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

1.1. Product identifier

Product form	: Substance
Trade name	: Antimony(III) chloride a.r.
EC Index-No.	: 051-001-00-8
EC-No.	: 233-047-2
CAS-No.	: 10025-91-9
REACH registration No	: 01-2119923879-20
Product code	: CL00.0150
Type of product	: Pure substance, Hygroscopic substance. Preventive measures apply to the substance in dry state only
Formula	: SbCl ₃
Synonyms	: antimonous chloride / antimony butter / antimony chloride (=antimony trichloride) / antimony trichloride / antimony trichloride (SbCl ₃) / antimony(III)chloride / butter of antimony (=antimony(III)chloride) / caustic antimony / CI 77056 / stibine, trichloro- / trichlorostibine

1.2. Relevant identified uses of the substance or mixture and uses advised against

1.2.1. Relevant identified uses

Use of the substance/mixture : Laboratory chemical

1.2.2. Uses advised against

No additional information available

1.3. Details of the supplier of the safety data sheet

Chem-Lab nv
Industriezone "De Arend" 2
Zedelgem - Belgium
T +32 50 288320
info@chem-lab.be - www.chem-lab.be

1.4. Emergency telephone number

Emergency number : +32 50 28 83 20

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification according to Regulation (EC) No. 1272/2008 [CLP]

Skin corrosion/irritation, Category 1B H314

Hazardous to the aquatic environment — Chronic Hazard, Category 2 H411

Full text of H statements : see section 16

Specific concentration limits:

(C >= 5) STOT SE 3, H335

Adverse physicochemical, human health and environmental effects

No additional information available

2.2. Label elements

Labelling according to Regulation (EC) No. 1272/2008 [CLP]

Hazard pictograms (CLP) :



GHS05

GHS09

Signal word (CLP) :

Danger

Hazard statements (CLP) :

H314 - Causes severe skin burns and eye damage.
H411 - Toxic to aquatic life with long lasting effects.

Precautionary statements (CLP) :

P309+P311 - IF exposed or if you feel unwell: Call a POISON CENTER or doctor/physician.
P273 - Avoid release to the environment.
P301+P330+P331 - IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.
P305+P351+P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

2.3. Other hazards

No additional information available

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according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830

SECTION 3: Composition/information on ingredients

3.1. Substances

Substance type : Mono-constituent

Name	Product identifier	%	Classification according to Regulation (EC) No. 1272/2008 [CLP]
Antimony(III) chloride a.r.	(CAS-No.) 10025-91-9 (EC-No.) 233-047-2 (EC Index-No.) 051-001-00-8 (REACH-no) 01-2119923879-20	100	Skin Corr. 1B, H314 Aquatic Chronic 2, H411

Specific concentration limits:

Name	Product identifier	Specific concentration limits
Antimony(III) chloride a.r.	(CAS-No.) 10025-91-9 (EC-No.) 233-047-2 (EC Index-No.) 051-001-00-8 (REACH-no) 01-2119923879-20	(C >= 5) STOT SE 3, H335

Full text of H-statements: see section 16

3.2. Mixtures

Not applicable

SECTION 4: First aid measures

4.1. Description of first aid measures

First-aid measures general	: Check the vital functions. Unconscious: maintain adequate airway and respiration. Respiratory arrest: artificial respiration or oxygen. Cardiac arrest: perform resuscitation. Victim conscious with laboured breathing: half-seated. Victim in shock: on his back with legs slightly raised. Vomiting: prevent asphyxia/aspiration pneumonia. Prevent cooling by covering the victim (no warming up). Keep watching the victim. Give psychological aid. Keep the victim calm, avoid physical strain. Depending on the victim's condition: doctor/hospital.
First-aid measures after inhalation	: Remove the victim into fresh air. Doctor: administration of corticoid spray. Immediately consult a doctor/medical service.
First-aid measures after skin contact	: Wash immediately with lots of water (15 minutes)/shower. Do not apply (chemical) neutralizing agents. Remove clothing while washing. Do not remove clothing if it sticks to the skin. Cover wounds with sterile bandage. Consult a doctor/medical service. If burned surface > 10%: take victim to hospital.
First-aid measures after eye contact	: Rinse immediately with plenty of water for 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Take victim to an ophthalmologist. Do not apply neutralizing agents.
First-aid measures after ingestion	: Rinse mouth with water. Immediately after ingestion: give lots of water to drink. Do not induce vomiting. Do not give activated charcoal. Immediately consult a doctor/medical service. Call Poison Information Centre (www.big.be/antigif.htm). Ingestion of large quantities: immediately to hospital. Take the container/vomit to the doctor/hospital. Do not give chemical antidote. Doctor: gastric lavage.

4.2. Most important symptoms and effects, both acute and delayed

Symptoms/effects after inhalation	: EXPOSURE TO HIGH CONCENTRATIONS: Corrosion of the upper respiratory tract. Dry/sore throat. Coughing. Respiratory difficulties. FOLLOWING SYMPTOMS MAY APPEAR LATER: Risk of lung oedema.
Symptoms/effects after skin contact	: Caustic burns/corrosion of the skin.
Symptoms/effects after eye contact	: Corrosion of the eye tissue.
Symptoms/effects after ingestion	: Burns to the gastric/intestinal mucosa. Possible esophageal perforation. Nausea. Vomiting.
Chronic symptoms	: ON CONTINUOUS/REPEATED EXPOSURE/CONTACT: Skin rash/inflammation. Enlargement/affection of the liver. Affection of the renal tissue. Change in the haemogramme/blood composition.

4.3. Indication of any immediate medical attention and special treatment needed

No additional information available

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media	: Quick-acting ABC powder extinguisher. Quick-acting BC powder extinguisher. Quick-acting CO2 extinguisher. Class B foam (alcohol-resistant); after consulting specialist.
Unsuitable extinguishing media	: Water (quick-acting extinguisher, reel); risk of puddle expansion. Quick-acting class B foam extinguisher. Water.

5.2. Special hazards arising from the substance or mixture

Fire hazard	: DIRECT FIRE HAZARD: Non combustible. INDIRECT FIRE HAZARD: Reactions involving a fire hazard: see "Reactivity Hazard".
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Explosion hazard : INDIRECT EXPLOSION HAZARD: Reactions with explosion hazards: see "Reactivity Hazard".

5.3. Advice for firefighters

Precautionary measures fire : Exposure to fire/heat: consider evacuation.
Firefighting instructions : Cool tanks/drums with water spray/remove them into safety. When cooling/extinguishing: no water in the substance. Dilute toxic gases with water spray.
Protection during firefighting : Heat/fire exposure: compressed air/oxygen apparatus.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

6.1.1. For non-emergency personnel

Protective equipment : Gloves. Face-shield. Corrosion-proof suit. Dust cloud production: compressed air/oxygen apparatus. Contact with moisture/water: compressed air/oxygen apparatus. Contact with moisture/water: gas-tight suit.
Emergency procedures : Keep upwind. Mark the danger area. Prevent dust cloud formation. Close doors and windows of adjacent premises. No naked flames. Keep containers closed. Avoid ingress of water in the containers. Wash contaminated clothes. On contact with moisture/water: consider evacuation. In case of reactivity hazard: consider evacuation.

6.1.2. For emergency responders

No additional information available

6.2. Environmental precautions

Prevent soil and water pollution. Prevent spreading in sewers.

6.3. Methods and material for containment and cleaning up

For containment : Contain released product, pump into suitable containers. Dam up the solid spill. Hazardous reaction: measure explosive gas-air mixture. Reaction: dilute combustible gas/vapour with water curtain. Knock down/dilute dust cloud with water spray. Take account of toxic/corrosive precipitation water.
Methods for cleaning up : Stop dust cloud by covering with sand/earth. Scoop solid spill into closing containers. Carefully collect the spill/leftovers. Clean contaminated surfaces with an excess of water. Take collected spill to manufacturer/competent authority. Small quantities of solid spill: neutralize with powdered limestone/sodium bicarbonate. Neutralized substance: wash down with an excess of water. Wash clothing and equipment after handling.

6.4. Reference to other sections

No additional information available

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Precautions for safe handling : Avoid raising dust. Keep away from naked flames/heat. Measure the concentration in the air regularly. Carry operations in the open/under local exhaust/ventilation or with respiratory protection. Comply with the legal requirements. Remove contaminated clothing immediately. Clean contaminated clothing. Thoroughly clean/dry the installation before use. Do not discharge the waste into the drain. Avoid contact of substance with water. Keep container tightly closed.
Hygiene measures : Observe strict hygiene.

7.2. Conditions for safe storage, including any incompatibilities

Heat and ignition sources : KEEP SUBSTANCE AWAY FROM: heat sources.
Information on mixed storage : KEEP SUBSTANCE AWAY FROM: oxidizing agents. (strong) bases. metals. halogens. water/moisture.
Storage area : Store in a dry area. Keep container in a well-ventilated place. May be stored under inert gas. Meet the legal requirements.
Special rules on packaging : SPECIAL REQUIREMENTS: hermetical. watertight. dry. clean. correctly labelled. meet the legal requirements. Secure fragile packagings in solid containers.
Packaging materials : SUITABLE MATERIAL: stainless steel. synthetic material. glass. stoneware/porcelain. MATERIAL TO AVOID: metal.

7.3. Specific end use(s)

No additional information available

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Antimony(III) chloride a.r. (10025-91-9)		
Belgium	Limit value (mg/m ³)	0.5 mg/m ³
France	VME (mg/m ³)	0.5 mg/m ³
Netherlands	Grenswaarde TGG 8H (mg/m ³)	0.5 mg/m ³ (als Sb)
United Kingdom	WEL TWA (mg/m ³)	0.5 mg/m ³

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Antimony(III) chloride a.r. (10025-91-9)		
USA - ACGIH	ACGIH TWA (mg/m ³)	0.5 mg/m ³
Antimony(III) chloride a.r. (10025-91-9)		
PNEC (Water)		
PNEC aqua (freshwater)	0.113 mg/l	
PNEC aqua (marine water)	0.0113 mg/l	
PNEC (Sediment)		
PNEC sediment (freshwater)	11.2 mg/kg dwt	
PNEC sediment (marine water)	2.24 mg/kg dwt	
PNEC (Soil)		
PNEC soil	37 mg/kg dwt	
PNEC (STP)		
PNEC sewage treatment plant	2.55 mg/l	
8.2. Exposure controls		
Materials for protective clothing:		
GIVE GOOD RESISTANCE: leather. neoprene. rubber		
Hand protection:		
Gloves		
Eye protection:		
Face shield. In case of dust production: protective goggles		
Skin and body protection:		
Corrosion-proof clothing. In case of dust production: head/neck protection		
Respiratory protection:		
Dust production: dust mask with filter type P3. High dust production: self-contained breathing apparatus		

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state	: Solid
Appearance	: Crystalline solid.
Molecular mass	: 228.1 g/mol
Colour	: Colourless-white to light yellow.
Odour	: Irritating/pungent odour. Unpleasant odour.
Odour threshold	: No data available
pH	: No data available
Relative evaporation rate (butylacetate=1)	: No data available
Melting point	: 73 °C
Freezing point	: No data available
Boiling point	: 223 °C
Flash point	: Not applicable
Auto-ignition temperature	: No data available
Decomposition temperature	: No data available
Flammability (solid, gas)	: No data available
Vapour pressure	: 0.16 hPa (20 °C)
Vapour pressure at 50 °C	: 1.9 hPa
Relative vapour density at 20 °C	: Not applicable
Relative density	: 3.1
Relative density of saturated gas/air mixture	: 1
Density	: 3140 kg/m ³

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Solubility	: Reacts with water. Soluble in ethanol. Soluble in ether. Soluble in acetone. Soluble in chloroform. Soluble in tetrachloromethane. Soluble in 1,4-dioxane. Soluble in carbondisulfide. Soluble in hydrogenchloride. Water: 10 g/100ml
Log Pow	: 1.66 (Estimated value)
Viscosity, kinematic	: No data available
Viscosity, dynamic	: No data available
Explosive properties	: No data available
Oxidising properties	: No data available
Explosive limits	: No data available

9.2. Other information

Saturation concentration	: 1.5 g/m ³
VOC content	: 0 %
Other properties	: Translucent. Hygroscopic. Producing fumes/mist. Acid reaction.

SECTION 10: Stability and reactivity

10.1. Reactivity

On exposure to air: release of corrosive mist. Reacts violently with (some) bases. Reacts with (some) halogens.

10.2. Chemical stability

Unstable on exposure to moisture. Unstable on exposure to air.

10.3. Possibility of hazardous reactions

No additional information available

10.4. Conditions to avoid

No additional information available

10.5. Incompatible materials

No additional information available

10.6. Hazardous decomposition products

On heating: release of toxic and corrosive gases/vapours (hydrogen chloride). Decomposes slowly on exposure to water (moisture): release of toxic and corrosive gases/vapours (hydrogen chloride). Reacts on exposure to water (moisture) with (some) metals: release of highly flammable gases/vapours (hydrogen).

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity (oral)	: Not classified
Acute toxicity (dermal)	: Not classified
Acute toxicity (inhalation)	: Not classified

Antimony(III) chloride a.r. (10025-91-9)

LD50 oral rat	525 mg/kg (Rat, Oral)
Skin corrosion/irritation	: Causes severe skin burns and eye damage.
Serious eye damage/irritation	: Serious eye damage, category 1, implicit
Respiratory or skin sensitisation	: Not classified
Germ cell mutagenicity	: Not classified
Carcinogenicity	: Not classified
Reproductive toxicity	: Not classified
STOT-single exposure	: Not classified
STOT-repeated exposure	: Not classified
Aspiration hazard	: Not classified
Potential adverse human health effects and symptoms	: Causes severe skin burns. Causes serious eye damage.

SECTION 12: Ecological information

12.1. Toxicity

Ecology - general	: Dangerous for the environment.
Ecology - air	: Not classified as dangerous for the ozone layer (Regulation (EC) No 1005/2009).
Ecology - water	: Toxic to aquatic organisms. Water pollutant (surface water). pH shift.
Acute aquatic toxicity	: Not classified
Chronic aquatic toxicity	: Toxic to aquatic life with long lasting effects.

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12.2. Persistence and degradability

Antimony(III) chloride a.r. (10025-91-9)	
Persistence and degradability	Biodegradability: not applicable.
Biochemical oxygen demand (BOD)	Not applicable
Chemical oxygen demand (COD)	Not applicable
ThOD	Not applicable
BOD (% of ThOD)	Not applicable

12.3. Bioaccumulative potential

Antimony(III) chloride a.r. (10025-91-9)	
Log Pow	1.66 (Estimated value)
Bioaccumulative potential	Low potential for bioaccumulation (Log Kow < 4).

12.4. Mobility in soil

No additional information available

12.5. Results of PBT and vPvB assessment

No additional information available

12.6. Other adverse effects

No additional information available






SECTION 13: Disposal considerations

13.1. Waste treatment methods

Product/Packaging disposal recommendations	: Remove waste in accordance with local and/or national regulations. Hazardous waste shall not be mixed together with other waste. Different types of hazardous waste shall not be mixed together if this may entail a risk of pollution or create problems for the further management of the waste. Hazardous waste shall be managed responsibly. All entities that store, transport or handle hazardous waste shall take the necessary measures to prevent risks of pollution or damage to people or animals. Recycle/reuse. Remove to an authorized dump (Class I). Immobilize the toxic or harmful components.
Additional information	: Hazardous waste according to Directive 2008/98/EC, as amended by Regulation (EU) No 1357/2014 and Regulation (EU) No 2017/997.
European List of Waste (LoW) code	: 15 01 10* - packaging containing residues of or contaminated by dangerous substances 06 04 05* - wastes containing other heavy metals

SECTION 14: Transport information

In accordance with ADR / RID / IMDG / IATA / ADN

ADR	IMDG	IATA	ADN	RID
14.1. UN number				
1733	1733	1733	1733	1733
14.2. UN proper shipping name				
Antimony trichloride	Antimony trichloride	Antimony trichloride	Antimony trichloride	Antimony trichloride
Transport document description				
UN 1733 Antimony trichloride, 8, II, (E), ENVIRONMENTALLY HAZARDOUS	UN 1733 Antimony trichloride, 8, II, MARINE POLLUTANT/ENVIRONMENTALLY HAZARDOUS	UN 1733 Antimony trichloride, 8, II, ENVIRONMENTALLY HAZARDOUS	UN 1733 Antimony trichloride, 8, II, ENVIRONMENTALLY HAZARDOUS	UN 1733 Antimony trichloride, 8, II, ENVIRONMENTALLY HAZARDOUS
14.3. Transport hazard class(es)				
8	8	8	8	8
				
14.4. Packing group				
II	II	II	II	II

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14.5. Environmental hazards

Dangerous for the environment : Yes	Dangerous for the environment : Yes Marine pollutant : Yes	Dangerous for the environment : Yes	Dangerous for the environment : Yes	Dangerous for the environment : Yes

No supplementary information available

14.6. Special precautions for user

Overland transport

Transport regulations (ADR) : Subject to the provisions
Classification code (ADR) : C2
Hazard identification number (Kemler No.) : 80
Orange plates : 

Tunnel restriction code (ADR) : E
EAC code : 4W

Transport by sea

Transport regulations (IMDG) : Subject to the provisions
EmS-No. (Fire) : F-A
EmS-No. (Spillage) : S-B

Air transport

Transport regulations (IATA) : Subject to the provisions

Inland waterway transport

Classification code (ADN) : C2

Rail transport

Transport regulations (RID) : Subject to the provisions
Classification code (RID) : C2

14.7. Transport in bulk according to Annex II of Marpol and the IBC Code

Not applicable

SECTION 15: Regulatory information

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

15.1.1. EU-Regulations

No REACH Annex XVII restrictions
Antimony(III) chloride a.r. is not on the REACH Candidate List
Antimony(III) chloride a.r. is not on the REACH Annex XIV List

VOC content : 0 %
Directive 2012/18/EU (SEVESO III)

15.1.2. National regulations

Germany

Reference to AwSV : Water hazard class (WGK) 2, significant hazard to water (Classification according to AwSV; ID No. 4055)
12th Ordinance Implementing the Federal Immission Control Act - 12.BImSchV : Is not subject of the 12. BImSchV (Hazardous Incident Ordinance)
TA Luft : 5.2.2 Inorganic Particulate Substances. Class III

Netherlands

SZW-lijst van kankerverwekkende stoffen : The substance is not listed
SZW-lijst van mutagene stoffen : The substance is not listed
NIET-limitatieve lijst van voor de voortplanting giftige stoffen – Borstvoeding : The substance is not listed
NIET-limitatieve lijst van voor de voortplanting giftige stoffen – Vruchtbaarheid : The substance is not listed
NIET-limitatieve lijst van voor de voortplanting giftige stoffen – Ontwikkeling : The substance is not listed

Denmark

Danish National Regulations : Young people below the age of 18 years are not allowed to use the product

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15.2. Chemical safety assessment

No additional information available

SECTION 16: Other information

Full text of H- and EUH-statements:

Aquatic Chronic 2	Hazardous to the aquatic environment — Chronic Hazard, Category 2
Skin Corr. 1B	Skin corrosion/irritation, Category 1B
H314	Causes severe skin burns and eye damage.
H411	Toxic to aquatic life with long lasting effects.

SDS Zonder Big

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product