

Material Safety Data Sheet

Antimony trichloride, reagent ACS, crystals, 99+%

ACC# 00252

Section 1 - Chemical Product and Company Identification

MSDS Name: Antimony trichloride, reagent ACS, crystals, 99+%

Catalog Numbers: AC401370000, AC401370050, AC401371000, AC401375000

Synonyms: Trichlorostibine; Antimonous chloride; Antimony(III) chloride; Antimony trichloride.

Company Identification:

Acros Organics N.V.

One Reagent Lane

Fair Lawn, NJ 07410

For information in North America, call: 800-ACROS-01

For emergencies in the US, call CHEMTREC: 800-424-9300

Section 2 - Composition, Information on Ingredients

CAS#	Chemical Name	Percent	EINECS/ELINCS
10025-91-9	Antimony(III) chloride	>99	233-047-2

Section 3 - Hazards Identification

EMERGENCY OVERVIEW

Appearance: white solid.

Danger! Corrosive. Causes severe eye and skin burns. Causes severe digestive and respiratory tract burns. May be harmful if swallowed. Moisture sensitive. Hygroscopic (absorbs moisture from the air).

Target Organs: Lungs, cardiovascular system, eyes, skin, mucous membranes.

Potential Health Effects

Eye: Causes eye burns.

Skin: Causes skin burns.

Ingestion: Causes gastrointestinal tract burns. May be harmful if swallowed.

Inhalation: Causes chemical burns to the respiratory tract. May cause lung damage. May produce cardiovascular effects.

Chronic: Chronic exposure may cause liver damage.

Section 4 - First Aid Measures

Eyes: In case of contact, immediately flush eyes with plenty of water for at least 15 minutes. Get medical aid immediately.

Skin: In case of contact, immediately flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Get medical aid immediately. Wash clothing before reuse.

Ingestion: If swallowed, do NOT induce vomiting. Get medical aid immediately. If victim is fully conscious, give a cupful of water. Never give anything by mouth to an unconscious person.

Inhalation: If inhaled, remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical aid.

Notes to Physician: Treat symptomatically and supportively.

Section 5 - Fire Fighting Measures

General Information: As in any fire, wear a self-contained breathing apparatus in pressure-demand, MSHA/NIOSH (approved or equivalent), and full protective gear. During a fire, irritating and highly toxic gases may be generated by thermal decomposition or combustion. May react with metals and lead to the formation of flammable hydrogen gas. Substance may react with water, and may release corrosive and/or toxic gases.

Extinguishing Media: Do NOT get water inside containers. For large fires, use water spray, fog or alcohol-resistant foam. Do NOT use straight streams of water. For small fires, use carbon dioxide, dry chemical, dry sand, or alcohol-resistant foam. Most foams will react with the material and release corrosive/toxic gases. Cool containers with flooding quantities of water until well after fire is out.

Flash Point: Not applicable.

Autoignition Temperature: Not available.

Explosion Limits, Lower: Not available.

Upper: Not available.

NFPA Rating: (estimated) Health: 3; Flammability: 0; Instability: 1; Special Hazard: -W-

Section 6 - Accidental Release Measures

General Information: Use proper personal protective equipment as indicated in Section 8.

Spills/Leaks: Vacuum or sweep up material and place into a suitable disposal container. Avoid generating dusty conditions. Provide ventilation. Do not get water inside containers. A vapor suppressing foam may be used to reduce vapors.

Section 7 - Handling and Storage

Handling: Wash thoroughly after handling. Remove contaminated clothing and wash before reuse. Use with adequate ventilation. Minimize dust generation and accumulation. Do not get in eyes, on skin, or on clothing. Do not ingest or inhale.

Storage: Store in a cool, dry, well-ventilated area away from incompatible substances. Keep away from water. Keep away from metals. Corrosives area. Keep containers tightly closed.

Section 8 - Exposure Controls, Personal Protection

Engineering Controls: Local exhaust ventilation may be necessary to control any air contaminants to within their TLVs during the use of this product. Facilities storing or utilizing this material should be equipped with an eyewash facility and a safety shower.

Exposure Limits

Chemical Name	ACGIH	NIOSH	OSHA - Final PELs
Antimony(III) chloride	0.5 mg/m3 TWA (listed under Antimony).	0.5 mg/m3 TWA (listed under Antimony).0.5 mg/m3 TWA (as Sb) (listed under Antimony compounds).50 mg/m3 IDLH (listed under Antimony).	0.5 mg/m3 TWA (listed under Antimony).0.5 mg/m3 TWA (as Sb) (listed under Antimony compounds).

OSHA Vacated PELs: Antimony(III) chloride: No OSHA Vacated PELs are listed for this chemical.

Personal Protective Equipment

Eyes: Wear appropriate protective eyeglasses or chemical safety goggles as described by OSHA's eye and face protection regulations in 29 CFR 1910.133 or European Standard EN166.

Skin: Wear appropriate protective gloves to prevent skin exposure.

Clothing: Wear appropriate protective clothing to prevent skin exposure.

Respirators: Follow the OSHA respirator regulations found in 29 CFR 1910.134 or European Standard EN 149. Use a NIOSH/MSHA or European Standard EN 149 approved respirator if exposure limits are exceeded or if irritation or other symptoms are experienced.

Section 9 - Physical and Chemical Properties

Physical State: Solid

Appearance: white

Odor: pungent odor

pH: Not available.

Vapor Pressure: 1 mm Hg @ 49.2C

Vapor Density: 7.9

Evaporation Rate:Not available.

Viscosity: Not available.

Boiling Point: 223 deg C

Freezing/Melting Point:73 deg C

Decomposition Temperature:Not available.

Solubility: soluble (but hydrolysis to SbOCl)

Specific Gravity/Density: 3.14

Molecular Formula:SbCl₃

Molecular Weight:228.11

Section 10 - Stability and Reactivity

Chemical Stability: Stable at room temperature in closed containers under normal storage and handling conditions.

Conditions to Avoid: Dust generation, exposure to moist air or water.

Incompatibilities with Other Materials: Incompatible with aluminum, potassium and sodium, perchloric acid.

Hazardous Decomposition Products: Hydrogen chloride, chlorine, irritating and toxic fumes and gases, antimony/antimony oxides.

Hazardous Polymerization: Has not been reported.

Section 11 - Toxicological Information

RTECS#:

CAS# 10025-91-9: CC4900000

LD50/LC50:

CAS# 10025-91-9:

Oral, rat: LD50 = 525 mg/kg;

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Inhalation TCLo (human): 73 mg/m3.

Carcinogenicity:

CAS# 10025-91-9: Not listed by ACGIH, IARC, NTP, or CA Prop 65.

Epidemiology: Existing industrial toxicologic information indicates that antimony trichloride (SbCl₃) irritates the upper respiratory tract and produces slightly delayed abdominal pain and loss of appetite. These indicative effects are over and above that of hydrochloric acid, believed to be the major hydrolytic product from contact with moist tissue..

Teratogenicity: No information available.

Reproductive Effects: See actual entry in RTECS for complete information.

Mutagenicity: Laboratory experiments have shown mutagenic effects.

Neurotoxicity: No information available.

Other Studies:

Section 12 - Ecological Information

No information available.

Section 13 - Disposal Considerations

Chemical waste generators must determine whether a discarded chemical is classified as a hazardous waste. US EPA guidelines for the classification determination are listed in 40 CFR Parts 261.3. Additionally, waste generators must consult state and local hazardous waste regulations to ensure complete and accurate classification.

RCRA P-Series: None listed.

RCRA U-Series: None listed.

Section 14 - Transport Information

	US DOT	Canada TDG
Shipping Name:	ANTIMONY TRICHLORIDE, SOLID	ANTIMONY TRICHLORIDE SOLID
Hazard Class:	8	8
UN Number:	UN1733	UN1733
Packing Group:	II	II

Section 15 - Regulatory Information

US FEDERAL

TSCA

CAS# 10025-91-9 is listed on the TSCA inventory.

Health & Safety Reporting List

None of the chemicals are on the Health & Safety Reporting List.

Chemical Test Rules

None of the chemicals in this product are under a Chemical Test Rule.

Section 12b

None of the chemicals are listed under TSCA Section 12b.

TSCA Significant New Use Rule

None of the chemicals in this material have a SNUR under TSCA.

CERCLA Hazardous Substances and corresponding RQs

CAS# 10025-91-9: 1000 lb final RQ; 454 kg final RQ

SARA Section 302 Extremely Hazardous Substances

None of the chemicals in this product have a TPQ.

SARA Codes

CAS # 10025-91-9: immediate, delayed, reactive.

Section 313

This material contains Antimony(III) chloride (listed as Antimony), >99%, (CAS# 10025-91-9) which is subject to the reporting requirements of Section 313 of SARA Title III and 40 CFR Part 373.

Clean Air Act:

CAS# 10025-91-9 (listed as Antimony compounds) is listed as a hazardous air pollutant (HAP).

This material does not contain any Class 1 Ozone depleters.

This material does not contain any Class 2 Ozone depleters.

Clean Water Act:

CAS# 10025-91-9 is listed as a Hazardous Substance under the CWA. CAS# 10025-91-9 is listed as a Priority Pollutant under the Clean Water Act. CAS# 10025-91-9 is listed as a Toxic Pollutant under the Clean Water Act.

OSHA:

None of the chemicals in this product are considered highly hazardous by OSHA.

STATE

CAS# 10025-91-9 can be found on the following state right to know lists: California, New Jersey, Pennsylvania, Minnesota, (listed as Antimony), Minnesota, (listed as Antimony compounds), Massachusetts.

California Prop 65

California No Significant Risk Level: None of the chemicals in this product are listed.

European/International Regulations

European Labeling in Accordance with EC Directives

Hazard Symbols:

C N

Risk Phrases:

R 34 Causes burns.

R 51/53 Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

Safety Phrases:

S 26 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.

S 45 In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).

S 61 Avoid release to the environment. Refer to special instructions /safety data sheets.

WGK (Water Danger/Protection)

CAS# 10025-91-9: 2

Canada - DSL/NDSL

CAS# 10025-91-9 is listed on Canada's DSL List.

Canada - WHMIS

This product has a WHMIS classification of E.

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations and the MSDS contains all of the information required by those regulations.

Canadian Ingredient Disclosure List

CAS# 10025-91-9 is listed on the Canadian Ingredient Disclosure List.

Section 16 - Additional Information
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MSDS Creation Date: 3/11/1999

Revision #3 Date: 6/01/2005

The information above is believed to be accurate and represents the best information currently available to us. However, we make no warranty of merchantability or any other warranty, express or implied, with respect to such information, and we assume no liability resulting from its use. Users should make their own investigations to determine the suitability of the information for their particular purposes. In no event shall Fisher be liable for any claims, losses, or damages of any third party or for lost profits or any special, indirect, incidental, consequential or exemplary damages, howsoever arising, even if Fisher has been advised of the possibility of such damages.