



NOVARINA s.r.l.

Via Pinerolo, 35 - 10060 BIBIANA (TO) - ITALY

Distributed By:



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SAFETY DATA SHEET

ANTIMONY POTASSIUM TARTRATE

1 Identification of the substance and of the company

1.1 Product identifier: ANTIMONY POTASSIUM TARTRATE, TARTAR EMETIC, CAS n° 11071-15-1 (anhydrous), 28300-74-5 (hydrated); EINECS n° 234-293-3 Dipotassium bis[mu-[tartrato(4-)-O1,O2:O3,O4]]diantimonate(2-), stereoisomer; REACH: This substance is PREREGISTERED submission number: PU272463-07 reference number: 05-2114684545-37-0000 dead time for registration 2018. U.N. 1551; CHEMICAL FORMULA C8H4K2O12Sb2 * 3H2O; MOLECULAR WEIGHT 667.85

1.2 Relevant identified uses of the substance and uses advised against: as mordant in the rayon textile and leather industry, in plating industries for electrolysis of zinc, in the cement industries as a chrome reducing agent. In all the processes where a soluble compound of Sb(III) is needed. Uses advised against: not known.

1.3 Details of the supplier of the safety data sheet

NOVARINA s.r.l. Address: via Pinerolo, 35 - 10060 BIBIANA (TO) - ITALY

TEL +39 0121 55724 FAX +39 0121 55111 e-mail: novarina@novarina.it

1.4 Emergency telephone number: +39 0121 55724 business hours, +39 339 6132875 sunday or holidays

E-mail address of the writer of the msds: novarina@novarina.it

2 Hazards identification



2.1 Classification of the substance: classification according to reg CE 1272/2008: GHS07, GHS09, Acute Tox.4 H302:Harmful if swallowed. Acute Tox.4 H332:Harmful if inhaled. Aquatic Chronic 2: H411: Toxic to aquatic life with long lasting effects. may cause long term adverse effects in the aquatic environment.

2.2 Label elements: Antimony Potassium Tartrate: U.N.: 1551- CAS: 11071-15-1 28300-74-5 - EINECS:

234-293-3 - CE: 051-003-00-9. H302: Harmful if swallowed. H332: Harmful if inhaled.

H411: Toxic to aquatic life with long lasting effect P 261: Avoid breathing dust P271: Use only outdoors or in a well-ventilated area. P273: Avoid release to the environment. P301+312: IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell. P304+340: IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. P501: Dispose of contents/container to authorized dump. Produced by Novarina s.r.l. - via Pinerolo, 35 - Bibiana (To) - Italy - Tel. +39 0121.55724 - Fax +39 0121.55111 - E-mail: novarina@novarina.it 2.3 Other hazards: dust emission is possible. it may cause irritation to eyes, skin and respiratory tract. (see 4.2)



3 Composition/information on ingredients

3.1 Substances: 100% ANTIMONY POTASSIUM TARTRATE: H302: Harmful if swallowed. H332: Harmful if inhaled. H411: Toxic to aquatic life with long lasting effects.

4 First aid measures

4.1 Description of first aid measures: P301+312: IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell. P304+340: IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. P264 Wash hands thoroughly after handling. P330 Rinse mouth. EYE CONTACT: Flush eyes with plenty of water for at least 15 minutes, lifting upper and lower eyelids occasionally. Seek for medical advice. INHALATION: Breathe clear air, if not breathing, give artificial respiration, if breathing is difficult give oxygen; seek for medical advice. INGESTION: Induce vomiting immediately as directed by medical personnel. Never give anything by mouth to an unconscious person. Seek for medical advice. SKIN CONTACT: Flush skin with plenty of water, remove contaminated clothing and shoes. Wash clothing before reuse. 4.2 Indication of any immediate medical attention and special treatment needed: INHALATION: May cause irritation to the nose and throat coughing, shortness of breath, and sore. INGESTION: May cause burning pain in oesophagus, vomiting, salivation, cough, bloody diarrhea, dizziness, irritability, and muscular pains. May cause heart to beat irregularly. EYE CONTACT: May cause severe irritation, redness and pain. SKIN CONTACT: May cause irritation. CHRONIC EXPOSURE: Prolonged and repeated skin exposure may cause dermatitis, prolonged and repeated inhalation may cause blood, liver and CNS effects, heart muscle damage, laryngitis, headache, loss of weight, and anemia. AGGRAVATION OF PRE EXISTING CONDITION: People with pre existing skin disorders, respiratory or health problems may be more susceptible to the effects of the substance.

4.3 Indication of any immediate medical attention and special treatment needed: in case of doubt seek for medical advice

5 Firefighting measures

5.1 Extinguishing media: Not considered to be a fire hazard. Use any means suitable for extinguishing surrounding fire. 5.2 Special hazards arising from the substance: If involved in fire, fumes can contain carbon monoxide and dust

of antimony oxide. Not considered to be an explosion hazard. 5.3 Advice for firefighters Wear full protective clothing and self-contained breathing apparatus with full facepiece

6 Accidental release measures

P391 Collect spillage - P273: Avoid release to the environment. - P501: Dispose of contents/container to authorized dump 6.1. Personal precautions, protective equipment and emergency procedures: 6.1.1. For non-emergency personnel: avoid breathing the dust and contact with skin or eyes, leave the contaminated area. 6.1.2. For emergency responders: ventilate area, wear appropriate protective equipment (see section 8), avoid breathing the dust and contact with skin or eyes. 6.2. Environmental precautions Avoid river and sewage system pollution. 6.3. Methods and material for containment and cleaning up: In case of rain cover the product with a plastic sheet, to prevent the water solubility of the product. Cover the drains to avoid the product goes into the sewage system, pick up and place in plastic bag, using a method that does not generate dust (vacuum cleaner, or water cleaner). 6.4 Reference to other sections: see chapt 8 and 13.

7 Handling and storage P 261: Avoid breathing dust - P264 Wash hands thoroughly after handling - P270 Do not eat, drink or smoke when using this product - P271: Use only outdoors or in a well-ventilated area. P391 Collect spillage P273: Avoid release to the environment P501: Dispose of contents/container to authorized dump 7.1. Precautions for safe handling: use anti-dust mask, safety goggles and rubber gloves. Provide for a local or general exhausting system with air filtration before a new inflow in the environment (see 8.2 and 8.3). Avoid river and sewage system pollution. Remove contaminated clothing and protective equipment before entering eating areas. 7.2. Conditions for safe storage, including any incompatibilities: Keep in a tightly closed container, stored in a cool, dry and ventilated area. Isolate from incompatible substance (strong oxidants and strong acids). Containers of this material may be hazardous when empty since they retain product residues. 7.3. Specific end use(s) see 1.2.

8 Exposure controls/personal protection

P 261: Avoid breathing dust - P264 Wash hands thoroughly after handling - P270 Do not eat, drink or smoke when using this product - P271: Use only outdoors or in a well-ventilated area. A local or general exhausting system with air filtration before a new inflow in the environment is recommended to keep under control the exposure level.

8.1. Control parameters: EXPOSURE LIMITS: OSHA Permissible Exposure Limit (PEL): 0.5 mg Sb/m³ (TWA) -ACGIH Threshold Limit Value (TLV): 0.5 mg Sb/m³ (TWA) year2010.

8.2. Exposure controls . 8.2.1. Appropriate engineering controls pollution load control as described in UNI EN 1540, UNI EN 482, method NIOSH 0500 for total dust powder and NIOSH 7300:94 for the determination of antimony in aerial powder. 8.2.2. Individual protection measures, such as personal protective equipment **Eye / face protection:** Use chemical safety goggles, provide eye-wash fountain in work area. **skin protection:** Wear protective clothing, including boots, gloves type EN374 K o L, lab coat, apron or coveralls, as appropriate to prevent skin contact. **inhalation** If exposure limits are exceeded wear an appropriate respirator as FFP2 filter. The correct protection measures must be chosen considering the effective exposure and working conditions, consider to plan a valuation of the working area pollutant, If this product is used in water solution the protection measures need to be reevaluated

9 Information on basic physical and chemical properties

Appearance	Odour	Odour threshold;	pH	Melting point / freezing point;	Initial boiling point and boiling range;	Flash point;	Evaporation rate;
White powder	odourless	N.A (odourless)	3,5 – 4,5 in 2% water solution	N.A (decomposes)	N.A. (it is a solid)	not flammable	N.A. (it is a solid)

'Flammability (solid, gas)	Upper/lower flammability or explosive limits;	Vapour pressure;	Vapour density;	Relative density;	Solubility;	Partition coefficient: n-octanol/water;	Auto-ignition temperature;
not applicable	not flammable no explosive properties	N.A (solid)	N.A (solid)	1,2	In water at 25°C (68°F): 6.6g dissolves in 100 cc water.	Not available	N.A (not flammable)

Decomposition temperature	Viscosity;	Explosive properties;	Oxidising properties.
Not available	N.A.(solid)	no explosive properties	no Oxidising properties

N:A: = not applicable. For the not available data, studies are proceeding in compliance with REACH regulation, we will update the MSDS as soon as the studies will be terminated

10 Stability and reactivity

10.1 reactivity : it is a stable complex ion, it gives the reactions of tartrates and of antimony, it decomposes in strong acids, strong basis and strong reducing agents

- 10.2 Chemical stability Stable under ordinary conditions of use and storage.
10.3 Possibility of hazardous reactions: not reported in Reg CE 453/2010
10.4 Conditions to avoid: not reported in Reg CE 453/2010
10.5 Incompatible materials: not reported in Reg CE 453/2010
10.6 Hazardous decomposition products . There are no hazardous decomposition products known.

11 Toxicological information

11.1 Information on toxicological effects: (a) acute toxicity: LD 50 in mice (mg/Kg) 55 subcutaneous [The Merck Index 11th edition]. LD 50 in mice (mg/Kg) 65 intravenous [The Merck Index 11th edition]. LD 50 in rat (mg/Kg) 115 oral [Sax's Dangerous Properties of Industrial Material 9th ed]. LDL0 mouse (mg/Kg) 600 oral [Sax's Dangerous Properties of Industrial Material 9th ed.]
 (b) skin corrosion/irritation: not listed on Reg CE 1907/2006
 (c) serious eye damage/irritation: not listed on Reg CE 1907/2006
 (d) respiratory or skin sensitisation: not listed on Reg CE 1907/2006
 (e) germ cell mutagenicity: not listed on Reg CE 1907/2006
 (f) carcinogenicity: not listed on Reg CE 1907/2006; NTP CARCINOGEN: known: no - anticipated: no ; IARC CATEGORY :none; OSHAREG: no. ZLIST: no.
 (g) reproductive toxicity: not listed on Reg CE 1907/2006
 (h) STOT-single exposure: not listed on Reg CE 1907/2006
 (i) STOT-repeated exposure: not listed on Reg CE 1907/2006
 (j) aspiration hazard. not listed on Reg CE 1907/2006
Information on likely routes of exposure: by inhalation, ingestion, and by skin contact.
Symptoms related to the physical, chemical and toxicological characteristics : irritation to the nose and throat coughing, and sore. burning pain in oesophagus, vomiting, salivation, it may cause dermatitis in case of low personal hygiene

12 Ecological information

The substance is not included in the LIST OF MARINE POLLUTANT, IMDG Code including Amendment 27.
 H411: Toxic to aquatic life with long lasting effects - P391 Collect spillage - P501: Dispose of contents/container to authorized dump. - Work in respect of good manufacturing practice, avoid to release to the environment.
12.1. Toxicity: ACUTE TOXICITY 1mg/l<L(E)C50<10mg/l [European Commission Directorate general JRC, Joint Research Center, Environment Institute. European Chemicals Bureau.]

12.02 Persistence and degradability	At the moment these data are not available. Studies are proceeding to obtain these data. Results will be communicated with a new release of the MSDS. Within December 2011, with the reach registration, data should be available.
12.03 Bioaccumulative potential	
12.04 Mobility in soil	
12.05 Results of PBT and vPvB assessment	The substance is not included in the lists PBT or vPvB released to date.

13 Disposal considerations

P273: Avoid release to the environment. P391 Collect spillage.P501: Dispose of contents/container to authorized dump.
13.1 Waste treatment methods If possible recover. Dispose of container and unused contents in accordance with state and local requirements.Empty dirt containers have to be used with the same caution as the pure substance. As this compound is a toxic and harmful compound, use an authorized waste disposal for toxic and harmful compounds.

14 Transport information

14.1. UN number: 1551 14.2. UN proper shipping name: UN 1551 ANTIMONY POTASSIUM TARTRATE 14.3. Transport hazard class TOXIC- CLASS 6.1 ENVIRONMENTALLY HAZARDOUS. The substance is not included in the LIST OF MARINE POLLUTANT, MARPOL. IMDG Code EmS: F-A, S-A, category of segregation A. 14.4. Packing group: III, ADR/RID 6.1. T5 III. 14.5. Environmental hazards: ENVIRONMENTALLY HAZARDOUS 14.6. Special precautions for user: none. 14.7. Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code: no bulk transport used.



15: Regulatory information 15.1. Safety, health and environmental regulations/legislation specific for the substance: EC Directives 1907/2006 (reach),1272/2008 (GHS-CLP), EC directive n.2001/58, EC reg. n°453/2010, EC reg 286/2011, EC reg. 830/2015. CE NUMBER 051-003-00-9. Check your local regulation before use.15.2. Chemical safety assessment (see point 12.2 12.3 12.4 12.5)
 Classification according to reg CE 1272/2008: GHS07, GHS09, Acute Tox.4 H302:Harmful if swallowed. Acute Tox.4 H332:Harmful if inhaled. Aquatic Chronic 2: H411: Toxic to aquatic life with long lasting effects. may cause long term adverse effects in the aquatic environment.



16: Other information

NFPA Ratings: Health 2- Flammability 0- Reactivity 0.

This document is only intended as a guide to the appropriate precautionary handling of the material by a properly trained person using this product.

H frases (full list for the substance): H302: Harmful if swallowed. H332: Harmful if inhaled. H411: Toxic to aquatic life with long lasting effects.

P frases (full list for the substance): P 261: Avoid breathing dust. P264 Wash hands thoroughly after handling. P270 Do not eat, drink or smoke when using this product. P271: Use only outdoors or in a well-ventilated area. P273: Avoid release to the environment. P330 Rinse mouth. P391 Collect spillage P301+312: IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell. P304+340: IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. P501: Dispose of contents/container to authorized dump.

For further information about regulation, classification and labelling, please refer to the EEC web site:

"www.ecb.jrc.it/menu_ecb2001.htm" or "www.kemi.se/nclass", www.echa.europa.eu/information-on-chemicals.

The present MSDS has been revised to check the compliance with the EC reg 830/2015 in November 2015.

Updates to this edition: eliminated classification according to EC Regulation 67/548, updated IMDG classification.