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**SECTION1: IDENTIFICATION***a) Product identifier*

Substance name: Antimony trioxide  
Trade name: Twinkling Star  
CAS number: 1309-64-4

*b) Other means of identification*

Synonym: (Di)antimony trioxide (ATO); Antimony oxide (Sb<sub>2</sub>O<sub>3</sub>)

*c) Recommended use of the chemical and restrictions on use**Recommended use*

The major use of (di)antimony trioxide (ATO) is as a flame retardant. However, it does not have flame retarding properties itself; instead, it is a synergist for halogenated flame retardants in plastics, paints, adhesives, sealants, rubber, and textile back-coatings. Other uses of ATO include: polymerization catalyst in PET resin manufacture, clarifying aid in certain glasses, and in pigments (see Annex I for more details).

*Restrictions on use*

There are no restrictions on use.

*d) Details of the supplier of the safety data sheet*

Hsikwangshan Twinkling Star Co., Ltd.  
LENGSHUIJIANG, HUNAN, PEOPLE'S REPUBLIC OF CHINA  
Tel: +86 10 6849 5051  
Fax: +86 10 6849 4276  
E-mail: [luggq@minmetals.com](mailto:luggq@minmetals.com)

Importer:

*e) Emergency telephone number*

+46 8 6699001(Sweden)  
+1 714 5827563-7019(USA)

**SECTION2: HAZARD IDENTIFICATION***a) Classification of the substance or mixture*

Carcinogenicity Category 2

*b) Label elements*

Signal word: Warning

Hazard pictogram:

GHS08: health hazard

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Hazard statement:

Suspected of causing cancer by inhalation

Precautionary statements:

Obtain special instructions before use.

Do not handle until all safety precautions have been read and understood.

Wear protective gloves/protective clothing/eye protection /face protection.

IF exposed or concerned: Get medical advice/attention.

Store locked up

Dispose of contents/container in accordance with local/regional/national/international regulations.

For more information on human health and environmental effects see sections 9 to 12 of this SDS.

*c) Other hazards*

The substance does not meet the criteria for a PBT or vPvB substance.

No environmental or physico-chemical hazards identified according to HPR.

**SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS***a) Substance*

Chemical name	Common name and synonyms	CAS No.	% (w/w)
<b>Main constituent</b>			
(di)antimony trioxide	Antimony oxide ( $\text{Sb}_2\text{O}_3$ )	1309-64-4	>98 - <100
<b>Impurity</b>			
lead monoxide	Lead oxide ( $\text{PbO}$ )	1317-36-8	<0.1
(di)arsenic trioxide	Arsenic oxide ( $\text{As}_2\text{O}_3$ )	1327-53-3	<0.1
<b>Stabilizing additive</b>			
-			

The supplier has currently no knowledge on additional ingredients that are classified and that contribute to the classification of the substance.

See certificate of analysis for more information on impurity levels.

**SECTION 4: FIRST AID MEASURES***a) Description of first aid measures***General advice**

IF exposed or concerned: Get medical advice/attention.

Take off all contaminated clothing.

First-aiders should wear suitable personal protective equipment (see section 8) in case of insufficient ventilation or possible skin or eye contact.

**Following inhalation**

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Move affected person to fresh air.  
Seek medical attention.

**Following skin contact**

If normal occupational hygiene measures are maintained, there is no such foreseeable health hazard from ATO. Wash with water and remove clothes if necessary.

**Following eye contact**

If normal occupational hygiene measures are maintained, there is no such foreseeable health hazard from ATO. Flush eyes thoroughly with water, also under eyelids.

**After ingestion**

If normal occupational hygiene measures are maintained, there is no such foreseeable health hazard from ATO. Rinse mouth with water.

*b) Most important symptoms and effects, both acute and delayed*

Acute or delayed effects are not anticipated for ATO.

*c) Indication of any immediate medical attention and special treatment needed*

Not appropriate (see 4.2).

**SECTION 5: FIREFIGHTING MEASURES***a) Extinguishing media**Suitable extinguishing media*

Use firefighting measures that suit the environment.

The product is not combustible and does not support the combustion.

*Unsuitable extinguishing media*

None.

*b) Special hazards arising from the substance or mixture*

(Di)antimony trioxide dust.

*c) Special protective equipment and precautions for fire-fighters*

Wear a self-contained breathing apparatus and a fully protective suit and gloves. Dispose of fire debris and contaminated firefighting media in accordance with official regulations.

**SECTION 6: ACCIDENTAL RELEASE MEASURES***a) Personal precautions, protective equipment and emergency procedures**For non-emergency personnel:*

Avoid formation of dust.

Ensure adequate ventilation.

Keep unprotected persons away.

Although the substance has no acute toxicity, it is advised to avoid contact with skin, eyes, and clothing – wear suitable protective equipment (see section 8).

Avoid inhalation of dust – wear suitable protective equipment (see section 8).

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*For emergency responders:*

Avoid formation of dust.

Ensure adequate ventilation.

Keep unprotected persons away.

Although the substance has no acute toxicity, it is advised to avoid contact with skin, eyes, and clothing – wear suitable protective equipment (see section 8).

Avoid inhalation of dust – wear suitable protective equipment (see section 8).

*b) Methods and material for containment and cleaning up*

In any case avoid dust formation.

Sweep all spilled material or use an appropriate industrial vacuum cleaner.

Collect spilled material in suitable containers or closed plastic bags for recovery or disposal.

In case of disposal dispose spilled material or contaminated material as waste as described in section 13.

*c) Reference to other sections*

For more information on exposure controls/personal protection or disposal considerations, check section 8 and 13 of this safety data sheet.

**SECTION 7: HANDLING AND STORAGE***a) Precautions for safe handling**Protective measures*

Do not handle until all safety precautions have been read and understood.

As a precautionary measure, the wearing of chemical resistant gloves, long sleeved overalls and closed footwear, designed to minimize skin contact is suggested for all (di)antimony trioxide powder handling workplaces. Use personal protective equipment as required.

Provide showers, eye-baths and self-contained breathing apparatus nearby.

For more information, see the relevant Exposure Scenario, Annex I and check section 2.1: Control of workers' exposure.

*Advice on general occupational hygiene*

Avoid inhalation or ingestion.

General occupational hygiene measures are required to ensure a safe handling of the substance. These measures involve good personal and housekeeping practices (i.e. regular cleaning with suitable cleaning devices), no eating, drinking and smoking at the workplace and wearing standard working clothes and shoes unless otherwise stated.

Wash hands after use.

Remove contaminated clothing and protective equipment before entering eating areas.

Shower and change clothes at end of work shift. Do not wear contaminated clothing at home. Do not blow dust off with compressed air.

*b) Conditions for safe storage, including any incompatibilities*

Store in well ventilated dry area.

Do not store in open inadequate mislabeled packaging.

For more information, see the relevant Exposure Scenario, Annex I and check section 2.1: Control of workers' exposure.

**SECTION 8: EXPOSURE CONTROLS / PERSONAL PROTECTION**

An overview of the assigned protection factors (APFs) of different RPE (according to BS EN 529:2005) can be found in the glossary of MEASE ([www.ebrc.de/mease.html](http://www.ebrc.de/mease.html)).

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Any dust-tight material (e.g. rubber-dipped cotton/rubber/nitrile/leather) suitable for the type of work (e.g. considering mechanical stress) could be used as material for gloves protecting against ATO exposure (non-corrosive inorganic substance). Breakthrough times are not relevant because corrosion and diffusion are excluded by the nature of the substance. Change gloves when damaged or according to manufacturer's instructions.

#### a) Control parameters

##### Occupational exposure limit values

Chemical Name	ACGIH TLV	OSHA PEL	NIOSH IDLH
Lead monoxide (CAS #: 1317-36-8)	TWA: 0.05 mg/m <sup>3</sup> Pb	-	IDLH: 100 mg/m <sup>3</sup> Pb TWA: 0.050 mg/m <sup>3</sup> Pb
Arsenic trioxide (CAS #: 1327-53-3)	TWA: 0.01 mg/m <sup>3</sup> As	TWA: 10 µg/m <sup>3</sup> As	IDLH: 5 mg/m <sup>3</sup> As Ceiling: 0.002 mg/m <sup>3</sup> As 15 min
Antimony trioxide (CAS #: 1309-64-4)	TWA: 0.5 mg/m <sup>3</sup> Sb	TWA: 0.5 mg/m <sup>3</sup> Sb	IDLH: 50 mg/m <sup>3</sup> Sb TWA: 0.5 mg/m <sup>3</sup> Sb

#### b) Appropriate engineering controls

Prevent formation of dust where possible. Ensure appropriate ventilation/exhaustion at machinery and places where dust can be generated. Any deposit of dust which cannot be avoided must be regularly removed using preferably appropriate industrial vacuum cleaners or central vacuum systems.

Waste air is to be released into the atmosphere only when it has passed through suitable dust separators.

Waste water generated during the production process or cleaning operations should be collected and should preferably be treated in an on-site waste water treatment plant which ensures efficient removal of antimony.

#### c) Individual protection measures, such as personal protective equipment

##### Eye/face protection

Although the substance has no acute toxicity, it is advised to wear suitable safety glasses. NBN EN 166:2002 is recommended.

##### Skin protection

Hand and body protection:

ATO is not classified as hazardous to skin (see section 11 for more details). However, industry is committed to adequately control the risks of any adverse effects to workers who are exposed in hot, sweaty conditions to fumes or dust containing ATO by following the occupational hygiene practices as described in the relevant exposure scenarios. As a precautionary measure, the wearing of chemical resistant gloves, long sleeved overalls and closed footwear, designed to minimize skin contact is suggested for all (di)antimony trioxide powder handling workplaces because of possible skin rashes when sweat ducts are blocked – see RAC discussion (ECHA/PR/09/09, 2009).

##### Respiratory protection

Use local ventilation to keep levels below established threshold values. A suitable particle filter mask is recommended.

## SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

(a) Appearance	Crystalline white powder with particle size of 0.2 µm to 44 µm depending on the type of ATO
(b) Odour	Odourless.
(c) Odour threshold	Not applicable as odourless.

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<b>(d) pH</b>	Not applicable to powders.
<b>(e) Melting point/ freezing point</b>	656 °C at 1013 hPa
<b>(f) Initial boiling point and boiling range</b>	1425 °C at 1013 hPa
<b>(g) Flash point</b>	Not applicable as only relevant for liquids or low melting point solids.
<b>(h) Evaporation rate</b>	Not applicable to powders.
<b>(i) Flammability (solid, gas)</b>	Non-flammable. This substance does not contain any chemical groups that might lead to spontaneous ignition a short time after coming in contact with air at room temperature (circa 20 °C). Furthermore, long-term industrial experience in handling shows that the substance does not ignite in contact with air (in accordance with section 1 of REACH Annex XI).
<b>(j) Upper/lower flammability or explosive limits</b>	Non-explosive. (Di)antimony trioxide exhibits no chemical groups indicating explosive properties (e.g. peroxide).
<b>(k) Vapour pressure</b>	~133 Pa at 574 °C
<b>(l) Vapour density</b>	Not applicable to powders.
<b>(m) Relative density</b>	5.897 at 20 °C
<b>(n) Solubility(ies)</b>	2.76 mg/l (T° 22.2°C - ISO 6341 medium - loading 100 mg Sb <sub>2</sub> O <sub>3</sub> /l - pH 8)
<b>(o) Partition coefficient n-octanol/water</b>	Not applicable to inorganic substances.
<b>(p) Auto-ignition temperature</b>	Not relevant since this would require heat to be developed either by reaction of this substance with oxygen or by exothermic decomposition and which is not lost rapidly enough to the surroundings.
<b>(q) Decomposition temperature</b>	Does not decompose if used as intended.
<b>(r) Viscosity</b>	Not applicable to powders.
<b>(s) Explosive properties</b>	Non-explosive.
<b>(t) Oxidising properties</b>	Non-oxidising substance.

**SECTION 10: STABILITY AND REACTIVITY****a) Reactivity**

Not applicable. See section 9.

**b) Chemical stability**

Under normal conditions of use and storage, the product is stable.

**c) Possibility of hazardous reactions**

Reaction with H--equivalents releases antimony hydride (stibine, SbH<sub>3</sub>).

Hazardous polymerization will not occur.

**d) Conditions to avoid**

Avoid dust formation. See section 7.2 Conditions for safe storage, including any incompatibilities.

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**e) Incompatible materials**

Reaction with H--equivalents releases antimony hydride (stibine, SbH<sub>3</sub>). Strong acids/bases. Reducing agents. See section 7.1 Precautions for safe handling.

**f) Hazardous decomposition products**

Does not decompose if used as intended.

**SECTION 11: TOXICOLOGICAL INFORMATION****a) Information on the likely routes of exposure**

Inhalation: Inhalation of vapors in high concentration may cause irritation.

Ingestion: Ingestion may cause irritation to mucous membranes.

Skin contact: Prolonged or repeated contact with skin may cause irritation.

Eye contact: Contact with eyes may cause mechanical irritation.

**b) Information on toxicological effects**

Toxicity endpoints	Description of effects
<b>Absorption</b>	Oral = 0.05-0.3% Dermal = 0.01-0.1% (negligible) Inhalation = <<1 % Bioaccumulation potential: no bioaccumulation potential
<b>Acute toxicity</b>	Based on available data, the classification criteria for acute toxicity are not met. <u>Oral</u> : LD <sub>50</sub> rat > 20,000 mg/kg bw (Fleming, 1938; Gross et al, 1955; Weil et al, 1978) <u>Dermal</u> : LD <sub>50</sub> rabbit > 8,300 mg/kg bw (Gross et al, 1955) <u>Inhalation</u> : LC <sub>50</sub> rat > 5,200 mg/m <sup>3</sup> (Leuschner, 2006)
<b>Skin corrosion/irritation</b>	Based on available data, the classification criteria as skin irritant are not met. However, under conditions of substantial heat and sweating, high levels of dermal dust exposure may cause mechanical/physical blocking of sweat glands in the absence of any intrinsic substantial primary skin irritating potential of the substance and also in consideration of the poor solubility of ATO. The Committee for Risk Assessment (RAC) decided in July 2009 that a harmonised skin irritation classification was not supported (ECHA/PR/09/09, 2009). ATO is not a corrosive agent.
<b>Serious eye damage/irritation</b>	Based on available data, the classification criteria for eye irritation are not met (Leuschner, 2005).
<b>Respiratory or skin sensitisation</b> <b>Germ cell mutagenicity</b>	Based on available data, the classification criteria for skin sensitisation (Chevalier, 2005; Moore, G.E, 1994) and for irritation to the respiratory system (Leuschner, 2006) are not met. ATO does not cause systemic mutagenicity <i>in vivo</i> after oral administration. Negative <i>in vivo</i> results on chromosome aberrations and micronuclei were obtained in two different species via oral application – mouse (Elliot et al., 1998) and rat (Whitwell, 2006), (Kirkland et al., 2007). An <i>in vivo</i> UDS assay in rats was also negative (Elliot et al., 1998). Based on available data, the classification criteria according to regulation (EC) 1272/2008 as germ cell mutagen are not met.
<b>Carcinogenicity</b>	CAS# 1309-64-4: IARC 2B; ACGIH A2 (Di)antimony trioxide is classified as inhalation carcinogen category 2 (according to HPR). Three chronic inhalation studies in rats are available for the carcinogenicity assessment of (di)antimony trioxide (Watt, 1983; Groth et al., 1986a, Newton et al., 1994). The exposure

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	<p>duration in all three animal studies is 12 months and thus all studies deviates from the OECD guideline on chronic toxicity/carcinogenicity, which prescribes an exposure period of 24 months for rats. The study by Newton et al., (1994) showed no (di)antimony trioxide-related lung tumours, neither in males nor females, at any dose level up to 4.5 mg/m<sup>3</sup>. The study shows that (di)antimony trioxide reduced the pulmonary clearance rate in a dose dependent manner. However, it is well known that reduced lung clearance rate at chronic exposure of rats to poorly soluble particles (PSPs) can result in pulmonary overload, subsequently followed by an inflammatory response, epithelial cell hypertrophy and/or hyperplasia and squamous metaplasia. The persistence of these tissue responses over chronic time periods can lead to secondary development of lung tumours (Hext, 1994).</p> <p>Due to the deviations from the OECD guidelines and the critical shortcoming in all three studies, US NTP (<a href="#">National Toxicology Program</a>) has embarked on a testing programme leading to a new, full 2-year bioassay; finalised end 2010 and reporting expected in 2014-2015.</p> <p>The overall expert judgement by TC NES was that the most likely mechanism for carcinogenicity appears to be impaired lung clearance and particle overload followed by an inflammatory response, fibrosis and tumours. Consequently, (di)antimony trioxide can be regarded as a threshold carcinogen and as a starting point for a quantitative risk characterisation the NOAEC of 0.51 mg/m<sup>3</sup> derived for local repeated dose toxicity is also used for carcinogenicity. However, in this context, it is questionable whether effects caused by pulmonary overload in the rat are also relevant for humans.</p> <p>NOAEC: 0.51 mg/m<sup>3</sup> / Target organ: respiratory: lung</p>
<b>Reproductive toxicity</b>	<p>Based on the available long-term toxicity studies in rodents (Omura et al, 2002) and the relevant information on the toxicokinetic behaviour in rats, it is concluded that the classification criteria for reproductive toxicity are not met because of the lack of absorption and systemic distribution, and a correspondingly negligible exposure of reproductive organs in male and female mammalian species to ATO.</p> <p>The reference Schroeder R.E. (2003) was identified as key study for developmental toxicity and will be used for classification and labelling. This study suggests that the NOAEC for developmental toxicity is &gt;6.3 mg ATO/m<sup>3</sup>. Thus, based on available data, the classification criteria as developmental toxicant according to regulation (EC) 1272/2008 are not met.</p>
<b>STOT-single exposure</b>	Based on available data, the classification criteria as STOT-single exposure, oral and inhalation are not met since no reversible or irreversible adverse health effects were observed immediately or delayed after exposure.
<b>STOT-repeated exposure</b>	<p>NOAEC<sub>inhalation</sub> = 0.51 mg/m<sup>3</sup> (Newton et al, 1994) NOAEL<sub>oral</sub> = 1686 mg/kg/d (Hext et al, 1999)</p> <p>The NOAEC was determined in a study with a high background incidence of lung inflammation in controls, therefore there is considerable uncertainty regarding the reliability of this numerical value. The NOAEC is based on impaired lung clearance that was observed at 4.50 mg/m<sup>3</sup>.</p> <p>Based on available data, the classification criteria as STOT-repeated exposure, oral are not met since no reversible or irreversible adverse health effects were observed immediately or delayed after exposure (NOAEL is above the guidance value).</p> <p>Based on available data, the classification criteria as STOT-repeated exposure, inhalation are not met since there is an absence of consistent identifiable toxic effects other than the non-</p>



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	specific PSP overload, which is an adaptive response not triggering a STOT classification.
<b>Aspiration hazards</b>	ATO as an inorganic metal oxide is void of a low surface tension effect and as a solid does have a very high viscosity, i.e. an aspiration hazard can safely be excluded. Based on available data, the classification criteria are not met.

**SECTION 12: ECOLOGICAL INFORMATION****a) Ecotoxicity**

Antimony metal and antimony containing compounds will dissolve and generate antimony ions (Vangheluwe et al., 2001). The environmental section will therefore discuss the fate of antimony in general.

<b>Acute aquatic toxicity test results:</b>		
Marine fish [ <i>Pagrus major</i> ]	96 h LC50	6.9 mg Sb/L (Takayanagi, 2001)
Freshwater fish [ <i>Pimephales promelas</i> ]	96 h LC50	14.4 mg Sb/L (Brooke et al, 1986)
Invertebrates [ <i>Chlorohydra viridissimus</i> ]	96 h LC50	1.77 mg Sb/L (TAI, 1990)
Algae [ <i>Pseudokirchneriella subcapitata</i> ]	72 h ErC50 (growth rate)	> 36.6 mg Sb/L (Heijerick et al, 2004)
Plants [ <i>Lemna minor</i> ]	4 d EC50	> 25.5 mg Sb/L (Brooke et al, 1986)
<b>Chronic aquatic toxicity test results:</b>		
Fish [ <i>Pimephales promelas</i> ]	28 d NOEC/LOEC (growth; length)	1.13/2.31 mg Sb/L (Kimball, 1978)
Invertebrates [ <i>Daphnia magna</i> ]	21 d NOEC/LOEC (reproduction)	1.74/3.13 mg Sb/L (Heijerick et al, 2003)
Algae [ <i>Pseudokirchneriella subcapitata</i> ]	72 h NOEC/LOEC (growth rate)	2.11/4.00 mg Sb/L (Heijerick et al, 2004)
<b>Chronic sediment toxicity test results:</b>		
Midge [ <i>Chironomus riparius</i> ]	14 d NOEC (growth)	78 mg Sb/kg ww (Heijerick et al, 2005)
<b>Chronic terrestrial toxicity test results</b> (values were determined in a soil spiked with Sb <sub>2</sub> O <sub>3</sub> and aged for 31 weeks before testing):		
Soil invertebrates	NOEC	999 mg Sb/kg dw (Moser, 2007)
Plants	NOEC	999 mg Sb/kg dw (Smolders et al., 2007)
Soil microorganisms	NOEC	2930 mg Sb/kg dw (Smolders et al., 2007)
<b>Toxicity tests for microorganisms (for STP)</b>		
Aquatic microorganisms	NOEC	2.55 mg Sb/L (EPAS, 2005)
Inhibition of nitrification	EC50	27 mg Sb/L (EPAS, 2005)

For an overview of PNECs, check section 8.1.2 and for more information on how the environmental classification was derived, contact your supplier.

**b) Persistence and degradability**

Whereas antimony formally meets the criterion for persistence based on the absence of any degradation, this criterion is considered not to be applicable to inorganic elements. In addition, under conditions of a standard EUSES lake and the median partition coefficient for suspended matter, antimony meets the criteria for rapid removal from the water column.

**c) Bioaccumulative potential**

Antimony does not meet the criteria for bioaccumulation: a BCF for aquatic organisms of 40 and a BSAF of 1 for earthworms are derived, and are all much lower than the threshold of 2,000 l/kg. Also, there is evidence to support that

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antimony does not biomagnify in the food chain. Therefore, antimony is not considered bioaccumulative (B) or very bioaccumulative (vB) based on the definitive criteria.

*d) Mobility in soil*

A log Kp of 2.07 has been determined for soil.

*e) Other adverse effects*

(Di)antimony trioxide is not expected to contribute to ozone depletion, ozone formation, global warming or acidification.

### SECTION 13: DISPOSAL CONSIDERATIONS

*a) Waste treatment methods*

Whatever cannot be saved for recovery or recycling should be managed in an appropriate and approved waste disposal facility. If the percentage of ATO in waste is greater than 1 % then the waste must be treated as hazardous under Directive 91/689/EEC. If the concentration is below 1 % ATO-containing waste shall be handled as nonhazardous waste. All waste should be removed by licensed waste removal company, incinerated or recycled. If only the total antimony concentration in waste is known then waste with greater than 1 % antimony should be treated as hazardous under Directive 91/689/EEC. Processing, use or contamination of this product may change the waste management options. State and local disposal regulations may differ from federal disposal regulations. Dispose of container and unused contents in accordance with federal, state and local requirements. The used packing is only meant for packing this product. After usage, empty the packing completely.

Suitable disposal of hazardous waste for manufacturing and industrial use: Keep separate and dispose of to either

- Hazardous waste incineration operated according to Council Directive 2008/98/EC on waste, Directive 2000/76/EC on the incineration of waste and the Reference Document on the Best Available Techniques for Waste Incineration of August 2006.
- Hazardous landfill operated under Directive 1999/31/EC.

Suitable disposal of non-hazardous waste for manufacturing and industrial use: Disposal of wastes is possible via incineration (operated according to Directive 2000/76/EC on the incineration of waste) or landfilling (operated according to Reference Document on the Best available Techniques for Waste Industries of August 2006 and Council Directive 1999/31/EC and Council Decision 19 December 2002).

Suitable disposal of waste for professional use: Waste from end-of-life articles can be disposed of as municipal waste, except when they are separately regulated, like electronic devices, batteries, vehicles, etc. Disposal of wastes is possible via incineration (operated according to Directive 2000/76/EC on the incineration of waste) or landfilling (operated according to Reference Document on the Best available Techniques for Waste Industries of August 2006 and Council Directive 1999/31/EC and Council Decision 19 December 2002).

### SECTION 14: TRANSPORT INFORMATION

(Di)antimony oxide which does not contain more than 0.5% arsenic is considered not-dangerous and does not need to be classified for transportation.

RID/ADR: not restricted

ADNR/ADN: not restricted

IATA/ICAO: not restricted

IMO/IMDG: not restricted

*a) UN Number*

Not applicable (see introduction section 14)

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*b) Proper shipping name*

Not applicable (see introduction section 14)

*c) Transport hazard class(es)*

Not applicable (see introduction section 14)

*d) Packaging group*

Not applicable (see introduction section 14)

*e) Environmental hazards*

No environmental hazard

*f) Transport in bulk according to Annex II of MARPOL73/78 and the IBC code*

Not available

*g) Special precautions for user*

Not available

**SECTION 15: REGULATORY INFORMATION***a) Safety, health and environmental regulations/legislation specific for the substance or mixture**Worldwide Chemical Inventories*

EINECS (EU): conform

ENCS (Japan): 1-543

TSCA (USA): listed

ECL(Korea): KE/09846

DSL(Canada): listed

PICCS (Philippines): listed

AICS (Australia): listed

IECSC(China): listed

(Di)antimony trioxide is not a SEVESO substance, not an ozone depleting substance and not a persistent organic pollutant.

*Other regulatory information*

Water Hazard Class 1 VwVwS (Verwaltungsvorschrift wassergefährdende Stoffe) from 27.07.2005 (German Regulation)

**SECTION 16: OTHER INFORMATION**

Data are based on our latest knowledge but do not constitute a guarantee for any specific product features and do not establish a legally valid contractual relationship.

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Revision Note: Not applicable

Key or legend to abbreviations and acronyms used in the safety data sheet:

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory

## Safety Data Sheet (SDS)

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DSL - Canadian Domestic Substances List

EINECS - European Inventory of Existing Chemical Substances

ENCS - Japan Existing and New Chemical Substances

IECSC - China Inventory of Existing Chemical Substances

ECL - Korean Existing and Evaluated Chemical Substances

PICCS - Philippines Inventory of Chemicals and Chemical Substances

AICS - Australian Inventory of Chemical Substances

#### Disclaimer:

China Minmetals Nonferrous Metals Co.,Ltd.provides the information contained herein in good faith but makes no representation as to its comprehensiveness or accuracy. This document is intended only as a guide to the appropriate precautionary handling of the material by a properly trained person using this product. Individuals receiving the information must exercise their independent judgment in determining its appropriateness for a particular purpose. Furthermore, this safety data sheet (including its Annex) is made up based on the legal requirements as set by Regulation (EC) 1907/2006 (REACH) based on information as is available per August 1, 2010. Further information received following the time scale as foreseen by REACH and the guidance policies as described in the REACH Implementation Programs will be added when it becomes available.

\*\*\*\*\*THE END OF REPORT\*\*\*\*\*

**Safety Data Sheet (SDS)**

**OSHA Hazard Communication Standard (HCS) 2012**

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