



Material Safety Data Sheet

Antimony Trisulphide

Edition: 13/03/2015

In compliance with Regulation (EC) No 1272/2008

1) Identification of substance/preparation and of the company undertaking

Material	Antimony Trisulphide
Product form:	Substance
Company	Inoxia Ltd 45.7 Dunsfold Park Stovolds Hill Cranleigh Surrey GU6 8TB Tel: 02032 909990 safety@inoxia.co.uk www.inoxia.co.uk

1.2 RELEVANT IDENTIFIED USES OF SUBSTANCE

LUBRICANT ADDITIVE FOR BREAK LININGS

2) Hazards identification.

2.1 CLASSIFICATION OF THE SUBSTANCE / MIXTURE

2.1.1 Classification according to Regulation (EC) No 1272/2008

Not classified

2.1.1 Classification according to directive 67/548/EEC

Not classified

2.2 LABEL ELEMENTS

Not classified

No Signal Word

2.3 OTHER HAZARDS

Non known.

3) Composition/information on ingredients

3.2 COMPOSITION OF MIXTURES

Chemical Name	EX No.	CAS No.	Index No.	% Weight	REACH Registration No.	CLP classification according to Regulation (EC) 1272/	2008DAD classification according to Directive 67/548/EEC
Antimony Trisulphide	215-713-4	1345-04-6		>94%		Not classified	Not classified
Quartz	238-878-5	14808-60-7		<1%		STOT RE1	Xn:R48/20 if respirable

4) First Aid Measures

4.1 DESCRIPTION OF FIRST AID MEASURES

Eye: Immediately flush with clean water or eye wash solution, holding the eyelids apart for at least 15 minutes. Seek medical attention.

Skin: Wash affected skin immediately with plenty of water and soap. Remove contaminated clothing and wash clothing before re-using.

Inhalation: Remove exposed person to fresh air, keep warm and at rest. Get medical attention if discomfort continues.

Ingestion: Wash out mouth with water thoroughly. Do not ingest. Obtain medical attention.

4.2 MOST IMPORTANT SYMPTOMS AND EFFECTS, BOTH ACUTE AND DELAYED

Eye Contact: May cause redness and some pain or discomfort.

Respiratory System: May cause coughing.

4.3 INDICATION OF ANY IMMEDIATE MEDICAL ATTENTION AND SPECIAL TREATMENT NEEDED

Treat symptomatically, no special antidote required.

5) Fire Fighting Measures

5.1 EXTINGUISHING MEDIA

Non combustible product but the packaging and surrounding materials may be combustible. No limitations on extinguishing media.

5.2 SPECIAL HAZARDS ARISING FROM THE SUBSTANCE OR MIXTURE

Avoid inhalation of fumes. If involved in a fire, may produce toxic fumes of SO_x, metal oxides.

5.3 ADVICE FOR FIRE FIGHTERS

Self contained breathing apparatus and full protective clothing must be worn. Use an extinguishing agent suitable for the surrounding fire.

6) Accidental Release

6.1 PERSONAL PRECAUTIONS, PROTECTIVE EQUIPMENT AND EMERGENCY PROCEDURES

Remove any person not involved in the emergency intervention from the affected area.

Use personal protective equipment for protection of eyes and skin.

Avoid inhalation of dust.

Respiratory equipment should be worn if dust is created.

Provide adequate ventilation.

6.2 ENVIRONMENTAL PRECAUTIONS

Prevent product from entering drains, sewers or watercourses.

If the product does enter the watercourse immediately alert the Environmental Agency or other appropriate regulatory body.

6.3 METHODS AND MATERIAL FOR CONTAINMENT AND CLEANING UP

Avoid dry sweeping and dust creation. Collect powder using a special dust vacuum cleaner with particle filter. Transfer to a suitable labelled container for disposal according to local regulations. After collection of spillage wash affected area with water but do not let contaminated water enter the drains, sewers or watercourses.

6.4 REFERENCE TO OTHER SECTIONS

Suitable equipment for eye/face, skin and respiratory protection is quoted in section 8.

Suitable methods for disposal are given in section 13.

7) Handling/Storage

7.1 PRECAUTIONS FOR SAFE HANDLING

In working areas do not eat, drink or smoke when using this product. Remove contaminated clothing and protective equipment before entering eating areas.

Avoid skin and eye contact, creation and inhalation of dust.

Do not breathe dust/fume/gas/mist/vapours/spray.

Handle product in accordance with good industrial hygiene practice.

The use of engineering measures (e.g. local dust extraction) is recommended to provide effective dust control in order to ensure compliance with the current Occupational Exposure Limits.

7.2 CONDITIONS FOR SAFE STORAGE, INCLUDING ANY INCOMPATIBILITIES

Keep in original, tightly closed packaging, in a cool and well ventilated area.

7.3.1 SPECIFIC END USE

Use of this product is restricted to "professional user". Please refer to section 8 and the relevant exposure scenario

8) Exposure Controls/Personal Protection

8.1 CONTROL PARAMETERS

C. A.S. No.	Substance	WEL TWA – 8Hrs
1345-04-6	Antimony Trisulphide	0.5mg/m ³
14808-60-7	Quartz	0.1mg/m ³

8.2 EXPOSURE CONTROLS

Respiratory: In cases of prolonged exposure to airborne dust concentrations, wear respiratory protective equipment with filter that complies with EN 149.

Hands: Protective gloves suitable for chemical products according to EN 374.

Eyes: Safety glasses compliant with EN 166.

Skin: Skin protected compounds recommended for workers who suffer from dermatitis or sensitive skin.

General: Protective overalls. Soiled clothing must be adequately laundered to avoid becoming a dust source.

9) Physical/Chemical Properties

9.1. INFORMATION ON BASIC PHYSICAL AND CHEMICAL PROPERTIES

Appearance	Black dust
Odour	Odourless or slightly sulphur
Boiling point	~1150°C
Melting point	~550°C
Flash point:	Not applicable
Density	4.64g/cc at 20°C
Boiling point/Boiling range	400° C
Flash point	Not applicable
Density	4.64g/cc at 20°C
Flammability	Not readily flammable
Explosive properties	Not applicable
Solubility in water	0.001g/l at 20°C

9.2 OTHER INFORMATION

None available

10) Stability/Reactivity

10.1 REACTIVITY

Stable under normal conditions.

10.2 CHEMICAL STABILITY

Stable under normal conditions.

10.3 POSSIBILITY OF HAZARDOUS REACTIONS

Store separately from strong oxidisers and strong acids. SO₂ formation on contact with strong oxidising agents. H₂S formation on contact with strong acids.

10.4 CONDITIONS TO AVOID

None known.

10.5 INCOMPATIBLE MATERIALS

None known.

10.6 HAZARDOUS DECOMPOSITION PRODUCTS

None under normal conditions

11) Toxicological Info

11.1 INFORMATION ON TOXICOLOGICAL EFFECTS

11.1.1 Toxicological Data

Acute Toxicity

LD50 rat (oral) >2000mg/kg

LD50 rat (dermal) >2000mg/kg

LC50 rat (inhalative) >5.04g/m³

Ingestion

Not determined.

Inhalation

Dust in high concentrations may irritate the respiratory system causing coughing.

Skin Contact

Irritating to skin for prolonged or repeated exposure.

Eye Contact

Causes irritation to eyes by friction.

Target Organs

With the concentrations of quartz being less than 1% in this product overexposure to quartz is not expected at the given concentration present, but quartz / cristobalite is a confirmed human carcinogen. Repeated inhalation of quartz / cristobalite overtime may cause fibrotic lung disease and respiratory cancer.

12) Ecological Information

12.1 TOXICITY

LC50 96 hours Fish Not determined.

EC50 48 hours Aquatic Not determined.

12.2 PERSISTANCE AND DEGRADIBILITY

Not determined.

12.3 BIOACCUMULATIVE POTENTIAL

Not determined.

12.4 MOBILITY IN SOIL

Not determined.

12.5 RESULTS OF PBT AND vPvB ASSESSMENT

Not determined.

12.6 OTHER ADVERSE EFFECTS

By intended use and observance of regulations / advices for storage and handling no adverse effects are expected.

13) Disposal Considerations

13.1 WASTE TREATMENT METHODS

Dispose of according to national / regional legislation. For disposal inside the EU the relative European Waste Catalogue code must be used. Empty packaging must be disposed of as the contained material.

14) Transport Information

14.1 UN-NUMBER

Not applicable.

14.2 UN PROPER SHIPPING NAME

Not applicable.

14.3 TRANSPORT HAZARD CLASSES

Not classified.

14.4 PACKING GROUP

Not classified.

14.5 ENVIRONMENTAL HAZARDS

Not classified.

14.6 SPECIAL PRECAUTIONS FOR USER

Non known.

14.7 TRANSPORT IN BULK ACCORDING TO ANNEX II OF MARPOL 73/78 AND THE IBC CODE

Not applicable.

15) Regulatory Information

15.1 EU REGULATIONS

Regulation (EC) No. 2037/2000 (substances that deplete ozone)

Not applicable

Regulation (EC) No. 850/2004 (persistent organic pollutants)

Not applicable

Regulation (EC) No.689/2008 (concerning the export and import of dangerous chemicals)

Not applicable

Regulation (EC) No. 1272/2008 (classification, Labelling and Packaging of substances and mixtures)

Not applicable

Source of Reference for OELs

HSE EH40 for Workplace Exposure Limits

15.2 CHEMICAL SAFETY ASSESSMENT

No chemical safety assessment has been carried out by the supplier.

16) Other Information

(i) Indication of changes

Changes made to data sheet to comply with changes to regulation (EC) No 1272/2008 on the classification, labelling and packaging of substances and mixtures.

This MSDS was last reviewed: June 2008.

(ii) Abbreviations and acronyms

WEL TWA – 8Hrs – Workplace Exposure Limits Time Weighted Average – 8 Hours

PBT – Persistent, Bio accumulative and Toxic.

vPvB – very Persistent very Bio accumulative.

STOT RE1 – Specific Target Organ Toxicity Repeated Exposure Category 1.

LC50 – Lethal concentration 50%

LD50 – Lethal dose 50%

(iii) Key Literature References and Sources of Data

Guidance Note EH40 Occupational Exposure Limits is published annually by the Health and Safety Executive. The latest relevant limits should be observed.

HS(G) 37 1993 "An introduction to Local Exhaust Ventilation" and Guidance Note EH44 2013 "Dust in the Work Place" are both available from HM Stationery Office.

Advice on respiratory protective equipment is also given in BS EN 529:200.

EN166 : 2002 Personal Eye Protection.

EN 374-3 2003: Determination of Resistance to Permeation by Chemicals.

EN 388:2003: Gloves giving protection from Mechanical Risks.

EN 149:2001: Respiratory Protective Devices.

(iv) Classification and procedure used to derive the classification for mixtures according to Regulation (EC) No 1272/2008 CLP

This material is not classified according to the Regulation (EC) 1272/2008 with the respirable quartz being less than 1%.

(v) Relevant R-phrases and / or H-statements

Xn:R48/20 Harmful: Danger of serious damage to health by prolonged inhalation.

H373 – May cause damage to lungs through repeated exposure.

(vi) Training Advice

All employees should be given adequate training in the proper use and handling of this product and any precautions and protective equipment required under applicable regulations

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