

Document Type:

Material Safety Data Sheet



Title:

Shock Tube

1. Identification of the product and Company Identification

Shipping Name Articles, explosives, n.o.s.

Product Name Shock Tube

Supplier: BME, A Member of Omnia Group (Pty) Ltd.
P.O. Box 70040
Bryanston
South Africa
2021

Tel: 27 11 7098791
Fax: 27 11 4633023

Physical Address: BME, A Member of Omnia Group (Pty) Ltd.
Omnia House
Epsom Downs Office Park
13 Sloane Street
Epsom Downs
Bryanston

Tel: 27 11 7098791
Fax: 27 11 4633023

2. Composition/information on ingredients

Recommended Use: Used for Shock Tube Initiating Systems for explosives charges, particularly stope and development charges underground.

Appearance: Double extruded poly ethylene tubing (normally green or orange) with a dusting of RDX and Aluminium adhering to the internal surface. It has no detectable odour.

CHEMICAL ENTITY	CAS No	PROPORTION
Plastic tubing (Poly ethylene)		Very High
Aluminium Powder	7429-90-5	Very Low (<0.1%)
Cyclo-trimethylene trinitramine (RDX)		Very Low (0.2-0.4%)

Proportion (% weight per weight): *Very High >60%, High 30-60%, Medium 10-29%, Low 1-9%, Very Low <1%*

3. Hazards identification

Based on available information, this material is not classified as hazardous according to health criteria of international authorities. No exposure to hazardous chemicals is expected to occur during the intended product use. Misuse of the product may result in exposure to hazardous chemicals. It is our belief that, under conditions of normal occupational exposure, this product should pose no hazard to the user.

Classified as Dangerous Goods under the UN Code for the Transport of Explosives by Road and Rail.

Class: 1.4S or Unclassified

Poisons Schedule: None allocated

4. First aid measures

This is a packaged product that will not result in exposure to the contents under normal conditions of use.

Swallowed: Not a likely route of exposure

Eye contact: Not a likely route of exposure.

Skin: Not a likely route of exposure. Dust particles may cause skin irritation in sensitive workers.

Inhalation Not a likely route of exposure

Notes to physician: None.

5. Fire-fighting measures

Specific hazards: May burn vigorously with localised detonations and projection of fragments, with effects usually confined to the immediate vicinity of packages. Toxic smoke from combustion of plastic material may be emitted. If product functions, high heat and pressure are released from the end of the tube if not covered or enclosed.

Fire fighting: For shock tube only, consider initial isolation of at least 15 metres in all directions. Fight fire with normal precautions and methods used for plastic fires. Do not fight the fire if it is approaching an area containing explosives. **IF DETONATORS OR OTHER EXPLOSIVES ARE PRESENT – DO NOT FIGHT THE FIRE!**

6. Accidental release measures

Collect shock tube and sent to authorised burning grounds. If the ends of the tube have been opened such that powder may have been released from the tube, carefully clean "loose" powder spills using a damp sponge or rag and place in a bin containing a desensitising liquid such as industrial paraffin. To be destructed on an authorised burning grounds.

7. Handling and storage

Storage: Store in clean, cool, dry, well ventilated location.

Handling: Avoid rough handling as it could lead to powder loss.

8. Exposure controls/personal protection

National occupational exposure limits: 8-hr TWA OEL (mg/m³)
RDX – 10.00 mg/m³
Aluminium - 10.00 mg/m³

Engineering Measures: Natural ventilation should be adequate under normal use conditions. When testing, ensure adequate ventilation.

Personal protective equipment: Not required for normal use. Always wash hands before smoking, eating, drinking or using the toilet.

9. Physical and chemical properties

Form/Colour/Odour: Double extruded poly ethylene tubing (normally green or orange) with a dusting of RDX and Aluminium adhering to the internal surface. It has no detectable odour

Solubility: Insoluble in water.

10. Stability and reactivity

Stability: Stable under normal handling conditions.

11. Toxicological information

No adverse health effects if the product is handled in accordance with the Safety Data Sheet and the product label.

Ingestion: N/A

Eye contact: N/A

Skin contact: N/A

Inhalation: N/A

12. Ecological information

Avoid contaminating waterways

13. Disposal considerations

For small quantities: Follow destruction methods duly authorised by relevant authorities and internal management procedures.

Large quantities: Should be returned to BME or be disposed of in conjunction with relevant authorities.

14. Transport information

Road/Rail transport:

UN No: 0349
Class: 1.4S
Packing Group: II
Proper Shipping Name: Articles, Explosive, N.O.S.

Marine Transport:

UN No: 0349
Class: 1.4S
Packing Group: II
Proper Shipping Name: Articles, Explosive, N.O.S.

Air Transport:

UN No: 0349
Class: 1.4S
Packing Group: II
Proper Shipping Name: Articles, Explosive, N.O.S.

15. Regulatory Information

Based on information available, this material is not hazardous, based on adherence to safe working procedures.

16. Other information

History

Date of printing	:	02/03/2015
Date of issue	:	02/03/2015
Date of previous issue	:	08/01/2014
Recommended by	:	R Pathak – Research and Development Manager
Authorised by	:	D Mynhardt – Production and Technical Director

Remarks

This MSDS summarizes, at the date of issue, our best knowledge of the health and safety hazard information of the product, and in particular how to safely handle the product in the workplace. As **BME** cannot control the use and handling of the product, each user must review the MSDS in the context of how the user intends to handle and use the product in the workplace.
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