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|-------------------------|-------------------------|--|-------------|-----------------|
| ዾ bme | | Safety Data S Conforms to ISO 11014:2 | heet | |
| | Title: | SHOCK TUB | E™ | |

1. Identification of the product and Company Identification

| Product Name | SHOCK TUBE™ | Manufactured/ supplied by |
|----------------------------|------------------------------|--|
| Shipping name | Articles, explosives, n.o.s. | BME |
| Synonyms | - | A division of Omnia Group (Pty) Ltd |
| Chemical Formula | Not applicable | Physical address |
| Emergency telephone number | (+27) 11 706 3398 | Omnia Holdings, Building H Monte Circle Business Park |
| | | 178 Montecasino Boulevard Fourways Sandton, 2191 |
| QR code | | Postal address P.O. Box 70040 Bryanston, 2021 Gauteng, South Africa |
| | | <i>Contact</i> Tel: +27 11 7098888 E-mail: <u>info@bme.co.za</u> |

| 2. Hazards identification | on |
|--------------------------------------|--|
| to hazardous chemicals is expected t | naterial is not classified as hazardous according to health criteria of international authorities. No exposure o occur during the intended product use. Misuse of the product may result in exposure to hazardous conditions of normal occupational exposure, this product should pose no hazard to the user. |
| Classified as Dangerous Goods unde | r the UN Code for the Transport of Explosives by Road and Rail. |
| Class Poisons Schedule | 1.4S or Unclassified None allocated |
| GHS Classification: | Expl. 1.4: H204 Fire or projection hazard |
| | GHS precautionary Statements: Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Ground and bond container and receiving equipment. Do not subject to grinding/shock/friction. Wear protective gloves/protective clothing/eye protection/face protection/hearing protection. In case of fire: Evacuate area. Fight fire remotely due to the risk of explosion. Store in accordance with local/regional/national/international regulations. |

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| 3. Composition/informat | ion on ingre | edients | | | |
|---------------------------------------|---------------------------------|---|------------------------|--|--|
| Recommended Use : | Used for Shock charges undergro | | Systems for explosives | s charges, particularly stope and development | |
| Appearance : | | Double extruded polyethylene tubing (normally green or orange) with a dusting of RDX and Aluminium adhering to the internal surface. It has no detectable odour. | | | |
| Chemical Name | CAS No | % (Weight per weight) | EC Number | GHS Classification | |
| Plastic tubing (Poly ethylene) | | >60 | | | |
| Aluminium Powder | 7429-90-5 | <1% | 231-072-3 | | |
| Cyclo-trimethylene trinitramine (RDX) | 121-82-4 | 0.2-0.4% | 204-500-1 | Acute Tox. 2, H300 Acute Tox. 3, H311 Acute Tox. 3, H331 | |

4. First aid measures

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

| Ingestion Eye contact Skin | : | Not a likely route of exposure. Not a likely route of exposure. 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 EXPLOSICES 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

| Handling | : | Avoid rough handling as it could lead to powder loss. |
|----------|---|---|
| Storage | : | Store in clean, cool, dry, well ventilated location. |
| | | |

8. Exposure controls/personal protection

| National occupational exposure limits | : | 8-hr TWA OEL (mg/m ³) RDX – 10.00 mg/m ³ |
|---------------------------------------|---|---|
| Engineering Measures | - | Aluminium - 10.00 mg/m ³ 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. |

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| | | | | |

9. Physical and chemical properties

| Form/Colour/Odour | : | Double extruded polyethylene 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 Eye contact | : N/A : 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 Class/Division Packing group | : UN 0349 : 1.4S : II | | | | | |
| Proper Shipping Name Marine Transport: | : Articles, Explosive, N.O.S. | | | | | |
| UN No Class/Division Packing group Proper Shipping Name | : UN 0349 : 1.4S : II : Articles, Explosive, N.O.S. | | | | | |
| Air Transport : Class/Division Packing group Proper Shipping Name | : 1.4S : II : 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

None

History

| Date of printing Date of issue Date of previous issue | : 16-08-2024 : 16-08-2024 : 23-08-2022 | |
|---|--|--|
| | | |
| Recommended by | : Kady Govender – R&D Laboratory Supervisor | |

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| Authorized by | | | | | | |
| Authorised by : Myra Coetzer-Acting R&D Laboratory Manager | | | | | | |

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Remarks: This SDS 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 SDS in the context of how the user intends to handle and use the product in the workplace. context of how the user intends to handle and use the product in the workplace