



Document Type:	<h1>Safety Data Sheet</h1>	
Title:	<h2>AXXIS™</h2>	

1. Identification of the product and Company Identification

Shipping Name	Detonator Assemblies Electronic Delay Detonators, programmable for blasting	Manufactured/ supplied by
Trade Name	AXXIS™, AXXIS TITANIUM™, AXXIS SILVER™	BME A division of Omnia Group (Pty) Ltd <i>Physical address</i> Omnia Holdings, Building H Monte Circle Business Park 178 Montecasino Boulevard Fourways Sandton, 2191 <i>Postal address</i> P.O. Box 70040 Bryanston, 2021 Gauteng, South Africa <i>Contact</i> Tel: +27 11 7098888 E-mail: info@bme.co.za
Synonyms	EDD; Electronic Delay Detonator	
Chemical Formula	Not applicable	
Emergency telephone number	(+27) 11 706 3398	
QR code		

2. Hazards identification

Based on available information, this material is not classified as hazardous according to the health criteria of international authorities.	
Classified as Dangerous Goods, under the UN Code for the Transport of Explosives by Road and Rail.	
Class:	: 1.1B Explosive. : 1.4S Explosive. When packed in approved 1.4S packaging : 1.4B
Poisons Schedule:	None allocated
Additional Hazards:	Toxic fumes may be emitted on burning
GHS Classification:	Not Applicable

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3. Composition/information on ingredients

Recommended Use: Electronic Initiation System for explosive charges,

Appearance: Aluminium shells closed at one end and connected to a predetermined length of wire in a tubular spool configuration with a connector at the other end. The spool is held together in a clear shrink wrap. Odourless.

The electronic detonator assemblies consist of 3 parts that are interconnected: an aluminium shell, a spool of wire and a connector. Enclosed within the aluminium alloy shell are a printed circuit board, a fuse head, a primary charge, and a base charge. The primary charge and base charge consists of DDNP and PETN/RDX respectively. Refer to product data information for the specific configuration.

Substance/preparation:

Chemical name	CAS No	%	GHS Classification
Metal and plastic composition articles		> 60	Not applicable

4. First-aid measures

The construction of the items prevents any chemical contamination.

Ingestion: Remove object, obtain medical attention. Physicians are to be made aware of the risk of detonation.

Eye contact: In cases of eye injury or contamination, it is a sensible precaution to seek medical advice.

Skin: Not applicable unless injury due to detonation. Obtain medical attention immediately.

Inhalation: If exposed to fumes from detonation, in a poorly ventilated area, remove the victim from exposure and loosen clothing. Allow the patient to assume a most comfortable position and keep warm. Keep at rest until fully recovered. Seek medical advice if the effects persist.

Hearing: In the event of detonation in the vicinity, check the hearing system by a specialist.

Notes to physician: Treat symptomatically. Detonator assemblies are explosive – handle with care.

5. Fire-fighting measures

Specific hazards: Explosives material. Avoid all ignition sources.

Firefighting: Explosive. Severe detonation hazard when exposed to heat. In case of fire where the actual product is not involved, carefully remove the product to a safe distance, otherwise evacuate the area immediately and allow it to burn. On burning may emit toxic fumes. Firefighters should wear self-contained breathing apparatus if the risk of exposure to vapour or products of detonation.

6. Accidental release measures

Personal Precautions: Avoid exposure to shock, friction and anything that could cause a spark. Keep away from open flames or sources of heat. Shut off all potential sources of ignition.

Environmental Precautions: Shut off all ignition sources. Collect and seal in properly labelled containers for collection. In the case of a transport accident notify the Police, Explosives Inspectors and BME (Tel no. - 27 11 709 8777). Explosives should not be abandoned at any location for any reason.

7. Handling and storage

Handling:	No smoking or open fire is allowed in the vicinity. Heat or flame may cause detonation. Handle with care, preferably by hand.
Storage:	Store in clean, dry magazine suitably licensed for Class 1.1 explosives, safe from electric and magnetic risks in compliance with rules of compatibility of storage of product in original packaging. Do not store directly on the ground. Do not store with explosives or flammable products. Recommended storage temperature range -5°C to +30°C Do not subject materials to impact sparking or any type of heat.

8. Exposure controls/personal protection

National occupational exposure limits:	No value assigned for this specific material.
Engineering Measures:	When test firing, ensure adequate ventilation to maintain air concentration below Exposure Standard. Natural ventilation should be adequate under normal use conditions.
Personal protective equipment:	Hearing protection is recommended during controlled firing of the product Eye protection using safety goggles are strongly advised when working with the product. Always wash hands before smoking, eating, drinking or using the toilet. A respirator is not required under normal and intended conditions of product use.

9. Physical and chemical properties

Form/Colour/Odour:	Copper or aluminium shells closed at one end and connected to a length of yellow insulated copper wire which is terminated by a white, yellow or green connector at the other end. The wire is arranged in a tubular spool configuration with the aluminium shell and connector housed in the cavity of the spool. Odourless.
Solubility:	Insoluble in water.
Thermal Decomposition:	Explosion in the event of a rise in temperature
Hazardous Decomposition:	CO, CO ₂ , oxides of nitrogen.

10. Stability and reactivity

Stability:	Good stability under normal conditions. Detonation can occur from impact, friction and excessive heating. Possible transmission of the explosion to all other detonators in the package.
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11. Toxicological information

No adverse health effects if the product is handled per the Safety Data Sheet and the product label.	
Ingestion:	May cause irritation to the gastrointestinal tract. Keep under observation for possible lead poisoning. Long term exposure to low concentrations of lead may result in altered haemoglobin breakdown, kidney damage, anaemia and central and peripheral nervous system damage.
Eye contact:	Fumes from detonation or fire may cause eye irritation
Skin contact:	Only applicable in cases of detonation. Treat for shock, stop bleeding if applicable and obtain medical attention.
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.
Not to be thrown in sewers, natural environment or in refuse discharge. The operation of destroying pyrotechnical products by shooting or incineration must be carried out in a specially designated area by qualified personnel with the necessary safety measures in place. The procedures and instructions for the destruction of pyrotechnical products as well as the means of protecting personnel are to be defined by a safety study which fixes in particular maximum loadings according to the environment and the personnel to be protected. Explosive matters not to be mixed with priming devices at the time of the destruction of the latter.

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

Waste Classification: Hazardous Waste.

14. Transport information

UN No : UN 0511
 Class/Division : 1.1
 Compatibility Group : B
 Classification Code : 1.1B
 Proper Shipping Name : DETONATORS, ELECTRONIC programmable for blasting

(When packed in special approved packaging and appropriately marked):

UN No : UN 0513
 Class/Division : 1.4
 Compatibility Group : S
 Classification Code : 1.4S
 Proper Shipping Name : DETONATORS, ELECTRONIC programmable for blasting

UN No : UN 0512
 Class/Division : 1.4
 Compatibility Group : B
 Classification Code : 1.4B
 Proper Shipping Name : DETONATORS, ELECTRONIC programmable for blasting

15. Regulatory Information

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

16. Other information

Product Name: AXXIS™, Electronic Detonators for blasting

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 MSDS in the context of how the user intends to handle and use the product in the workplace.

History

Date of printing : 16-08-2024
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Date of previous issue : 22-08-2022
Recommended by : Kady Govender: R&D Laboratory Supervisor
Authorised by : Myra Coetzer: Acting R&D Laboratory Manager

Remarks:

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