

	Document Type: <h1 style="text-align: center;">Safety Data Sheet</h1>
	Title: <h1 style="text-align: center;">VIPERDET™</h1>

## 1. Identification of the product and Company Identification

<b>Product Name</b>	VIPERDET™	<b>Manufactured/ supplied by</b>
<b>Shipping name</b>	Detonator Assemblies, Non-electric, for blasting Detonators Non-Electric, for blasting	<b>BME</b> A division of Omnia Group (Pty) Ltd P.O. Box 70040 Bryanston South Africa 2021 Tel: 27 11 7098791 Fax: 27 11 4633023
<b>Synonyms</b>	VIPERDET™ MS; VIPERDET™ SD; VIPERDET™ LP; VIPERDET™ Trunkline	
<b>Chemical Formula</b>	Not applicable	
<b>Emergency telephone number</b>	<b>(+27) 11 706 3398</b>	

## 2. Composition/information on ingredients

<b>Recommended Use</b>	: Initiation System for explosives charges, particularly stope and development charges underground.	
<b>Appearance</b>	: Aluminium shells closed at one end and connected to each other with a length of plastic tube. Shells could be enclosed in a plastic connecting piece. The tubing is coiled tied with an easy breakable paper tape. Odourless. The non-electric detonator assemblies consist of a signal tube with a detonator at each end. The signal tube has a dusting of RDX and Aluminium adhering to the internal surface. The detonator has a base charge of RDX and/or PETN. Depending on product type one or more detonators could be enclosed in a plastic connector clip. Both detonators contain a pyrotechnic delay charge. Refer to product data information for specific configuration.	
<b>Chemical Entity</b>	<b>CAS No</b>	<b>PROPORTION</b>
Metal and plastic composition articles	7429-90-5	Very High
Aluminium Powder		Very Low
Cyclo-trimethylene trinitramine (RDX)		Very Low
<b>Proportion (% weight per weight): Very High &gt;60%, High 30-60%, Medium 10-29%, Low 1-9%, Very Low &lt;1%</b>		

## 3. Hazards identification

Based on available information, this material is not classified as hazardous according to health criteria of international authorities.	
Classified as Dangerous Goods under the UN Code for the Transport of Explosives by Road and Rail.	
<b>Class</b>	1.1B Explosives
<b>Poisons Schedule</b>	None allocated

## 4. First aid measures

The construction of the items prevents any chemical contamination.	
<b>Swallowed:</b>	Not applicable.
<b>Eye contact:</b>	In cases of eye injury or contamination, it is a sensible precaution to seek medical advice.
<b>Skin:</b>	Not applicable.
<b>Inhalation</b>	If exposed to fumes from detonation, in a poorly ventilated area, remove victim from exposure and loosen clothing. Allow patient to assume most comfortable position and keep warm. Keep at rest until fully recovered. Seek medical advice if effects persist.
<b>Notes to physician:</b>	Treat symptomatically. Detonator assemblies are explosive – handle with care.

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## 5. Fire-fighting measures

<b>Specific hazards</b>	:	Explosives material. Avoid all ignition sources
<b>Fire fighting</b>	:	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 area immediately and allow to burn. On burning may emit toxic fumes. Fire fighters should wear self-contained breathing apparatus if risk of exposure to vapour or products of detonation.

## 6. Accidental release measures

Shut off all ignition sources. Collect and seal in properly labelled containers for collection. In the case of a transport accidents notify the Police, Explosives Inspectors and BME (Tel nr. - 27 11 709 8777). Explosives should not be abandoned at any location for any reason.

## 7. Handling and storage

<b>Storage</b>	:	Store in clean, dry magazine suitably licensed for Class 1.1 explosives. Handle with care. Do not subject materials to impact sparking or any type of heat.
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## 8. Exposure controls/personal protection

<b>National occupational exposure limits</b>	:	No value assigned for this specific material.
<b>Engineering Measures</b>	:	When test firing, ensure adequate ventilation to maintain air concentration below Exposure Standard. Natural ventilation should be adequate under normal use conditions.
<b>Personal protective equipment</b>	:	Not in use. Always wash hands before smoking, eating, drinking or using the toilet.

## 9. Physical and chemical properties

<b>Form/Colour/Odour</b>	:	Aluminium shells closed at one end and connected to each other by a length of plastic tubing. One or more aluminium shells could be enclosed in a plastic connecting piece. Enclosed in sealed packs in carton. Odourless.
<b>Solubility</b>	:	Insoluble in water.

## 10. Stability and reactivity

<b>Stability</b>	:	Detonation can occur from impact, friction and excessive heating
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## 11. Toxicological information

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

<b>Ingestion</b>	:	N/A
<b>Eye contact</b>	:	May result in physical injury
<b>Skin contact</b>	:	N/A
<b>Inhalation</b>	:	N/A

## 12. Ecological information

Avoid contaminating waterways

## 13. Disposal considerations

<b>For small quantities</b>	:	Follow destruction methods duly authorised by relevant authorities and internal management procedures.
<b>Large quantities</b>	:	Should be returned to BME or be disposed of in conjunction with relevant authorities.

## 14. Transport information

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**Road/Rail transport:**

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

UN No: 0360  
Class: 1.1B  
HazChem Code: E  
Proper Shipping Name: Detonator Assemblies, Non-electric

UN No: 0029  
Class: 1.1B  
HazChem Code: E  
Proper Shipping Name: Detonators, Non-Electric

**Marine Transport:**

Classified as Dangerous Goods by the criteria of the International Maritime Dangerous Goods Code (IMDG Code) for transport by sea.

UN No: 0360  
Class: 1.1B  
Proper Shipping Name: Detonator Assemblies, Non-electric

UN No: 0029  
Class: 1.1B  
Proper Shipping Name: Detonators, Non-Electric

**Air Transport:**

TRANSPORT PROHIBITED under the Air Transport Association (IATA) Dangerous Goods Regulations for transport by air in passenger and cargo aircraft.

**15. Regulatory Information**

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

**16. Other information****History**

<b>Date of printing</b>	:	27-08-2018
<b>Date of issue</b>	:	27-08-2018
<b>Date of previous issue</b>	:	02-03-2015
<b>Recommended by</b>	:	B Victor – R&D and QA Manager
<b>Authorised by</b>	:	D Mynhardt – Executive Director Innovation Hub

**Remarks:**

This SDS summarises, 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.