

# Viperdet MS Dual



#### Equipment

- > Non-Electric
- > Initiation

## **Product Description**

ViperDet MS Dual is a bi-directional non-electric, surface delay, and in-hole detonator. Assemblies with a connector block for open pit mines, non-coal, and non-methane underground mines for the initiation of explosives as well as in construction and engineering works.



# Application

ViperDet MS Dual is used for open-pit mines, and underground non-coal and non-methane mines for initiation of explosives as well as in construction and engineering works.

ViperDet MS Dual detonators are intended for use in underground mines, where there is no coal dust and/or firedamp explosion hazard. The connector can hold up to 6 shock tubes and is designed to ensure easy connection, and reliable initiation while minimizing shrapnel damage to the shock tube.

# **Guidelines for Use**

### **Priming and Initiation**

Nominal PETN charge weight in In-hole detonator: 700 mg Surface detonator: 140 - 200 mg

Number of shock tubes that can be initiated with a single surface detonator : 6

#### Remarks:

For a safe and reliable initiation of a ViperDet MS Dual set it is advised to use a proper initiation device or other approved initiation measures like electric detonators.

Loading: Into dry Blast holes: Positive Into wet blast holes: Positive

Humid conditions and underwater: Applicability in humid conditions: Positive Water resistance (depth/time): 3 m / 48hrs



# Viperdet MS Dual



## Handling and Storage

Shelf life – 36 months from the date of production. Store under recommended storage conditions.

Storage conditions - Minimum storage temperature (- 45°C) and Maximum storage temperature (+65°C). The product should be stored in its original packaging.

First aid – Refer to Material Safety Data Sheet for first aid information.

Safety – All explosives are classified as dangerous goods and can cause death, personal harm or damage to property if not used correctly.

Transportation and storage - All explosives must be transported and stored in accordance with relevant regulations.

Disposal - Non-electric detonator waste as well as expired products and their packaging should be disposed of by authorized companies.

### **Product Specifications**

Shell material: Aluminium Shock tube colour: Yellow Connector material: PE

### **Specific Properties**

Type of Dual set.	Delay time (ms)Surface detonator/In-hole detonator	Connector colour
17/350	17/350	Yellow
17/500	17/500	Yellow
25/350	25/350	Red
25/500	25/500	Red
42/350	42/350	White
42/500	42/500	White
67/350	67/350	Black
67/500	67/500	Black

VOD of the explosive mixture inside the shock tube: 2000 m/s  $\pm$  10% Thermal stability in 75°C: 48 hrs Resistance to Hydrostatic pressure for 48 hrs: 1 MPa



# Viperdet MS Dual



## Packaging

Packaging unit

PE bag filled with bundles of 5 or 10 sets of non-electric detonators with the same delay time (depending on the length of the tube).

Shipping container Cardboard box.

Cargo safety measures

Shipping containers are placed on a wooden pallet, secured with stretch film.

#### Remarks

Other packaging methods are available after agreement with the customer.

Shock tube length [m]	Number of detonators in a bunch	Number of detonators in first/second bag	Number of detonators in a box
6	5	125/125	250
10	5	100/100	200
12	5	75/75	150
15	5	70/70	140
18	5	60/60	120
30	5	40/40	80

#### **Product Risk Profile**

- Classified as a hazardous substance, dangerous goods with mass explosion hazard
- Stable under normal storage conditions
- Risk of explosion by shock, friction, fire or other ignition sources
- DO NOT ATTEMPT TO FIGHT AN EXPLOSIVE FIRE

## **UN Classification for Transportation and Storage**

#### Proper shipping name Detonator assemblies, non-electric

Class

1





# Safe Use

- Never fight explosive fires.
- Refer to Safety Data Sheet (SDS) for first aid information.
- All explosives must be transported and stored in accordance to relevant regulations.
- All explosives are classified as dangerous goods and may cause damage to property, personal harm, or death, if not used correctly.
- Always keep products away from sources of heat, sparks, flame or hot surfaces and avoid mixing with combustibles or incompatible materials.

In case of emergencies, click here to contact our team for assistance.

# Disclaimer

All rights reserved. To the maximum extent permitted by law.

Omnia disclaims all liability whatsoever, whether arising in contract, delict (including negligence) or otherwise in relation to the use of any products/solutions or services and all implied warranties, terms and conditions relating to the products/solutions or services (whether implied by statue, common law or otherwise), including (without limitation) any warranty, term or condition as to accuracy, completeness, satisfactory quality, performance, fitness for purpose or any special purpose, non-infringement, information accuracy, as between Omnia and you, are hereby excluded. Omnia specifically disclaims liability and will not be responsible for, any liability or damages, howsoever arising, resulting from the use or reliance upon the information in this document.

You assume sole responsibility for results obtained from the use of the products/solutions or services, and for conclusions drawn from such use.

© Omnia Group (Pty) Ltd

+27 11 709 8765 | admin@bmeapp.co.za |

**BME Main Branch:** South Africa Omnia Holdings, Building H: Monte Circle Business Park, 178 Montecasino Boulevard, Fourways, Sandton, 2191