

Powergel Trimex

Detonator sensitive explosive used for presplitting, slop control, cushion blasting and smooth blasting

Powergel Trimex is designed for the blasting of perimeter holes in development and tunnel headings. The use of Powergel Trimex in this application delivers a high detonation velocity explosion combined with high levels of decoupling. This combination promotes clear perimeter crack patterns, without unacceptable levels of overbreak. Powergel Trimex is water resistant and can be used in wet and dry blastholes.

Description

Packaged Powergel Trimex is a detonator sensitive emulsion explosive. The emulsion is white in colour and is packaged in 19mm diameter, 735 mm long, opaque yellow, rigid plastic tubes. The tube's ends are sealed with caps and joiners that interconnect, enabling assembly to suit any hole length. Retention springs can be selectively clipped on to the tubes to ensure that the cartridge is securely retained in the blastholes.

Priming and Initiation

Powergel Trimex can be initiated by either the detonator of minimum number 8 strength or primer cartridge such as Powergel Magnum or Powergel Magnum 365. If initiated directly by a detonator it should be inserted through the thin end plug at the base of the tube. The detonator must not be used to pierce the thin end plug.

Charging

Retention springs may be attached to the Trimex tubes to prevent rifling during the blast. Simply fit the retention springs to the tubes prior to charging.

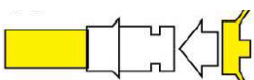


Fig 1. Click fit retention springs to joiner

The tubes of Powergel Trimex need to be connected together as they are inserted into the blasthole. Push the capped end into the joiner and twist to locate the barbs on the cap into the slots in the joiner.

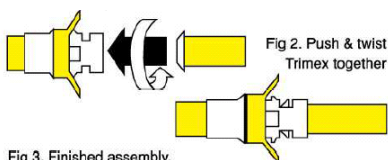


Fig 3. Finished assembly.

The primer or priming tube should be inserted into the blasthole first, with the detonator facing in the direction of initiation. Subsequent tubes should be loaded as required. To avoid face cratering dislocating the tubes, depending upon ground competency, the last 500, to 900mm should be left uncharged.

Detonating Cord Effects

Detonating cords are not recommended for use with Powergel Trimex.

Packaging

Each case of Powergel Trimex is the nominal of 20kg.

Storage and Handling Explosive Classification

Authorised Name Powergel Trimex
Correct Shipping Name EXPLOSIVE, BLASTING TYPE E
UN No.0241, Classification Code 1.1D
Powergel Trimex has a storage life in excess of months in an approved magazine, even in hot and humid extremes.

Safety Features

The post detonation fume characteristics of Powergel Trimex make it suitable for underground blasting applications. Users should ensure that adequate ventilation is provided prior to re-entry to the blast site. Powergel Trimex can be initiated by extremes of shock, friction or mechanical impact. As with all explosive, Powergel Trimex should be handled and stored with care. Powergel Trimex does not burn easily, but it must be kept clear of flame and excessive heat. Powergel Trimex does not burn easily, but it must be kept clear of flame and excessive heat. Powergel Trimex does not burn easily, but it must be kept clear of flame and excessive heat.

Technical Data

Relative Effective ¹			
For	19mm	diameter cartridge	
at density	1.10g/cc		
REE ¹	-Weight	Strength	
relative to loose poured ANFO =100%	@0.8g/cc		101%
REE ¹	-In Hole	Bulk Strength ²	
relative to blow loaded ANFO =100%	@0.95g/cc		19%

Typical Velocity of Detonation

4300 m/s

¹ The Relative Effective Energy (REE) of an explosive is the energy calculated to be available to do effective blasting work. It is calculated using the Orica IDeX computer code. The Energies quoted exclude the plastic packaging.

² Calculation of in-hole Bulk Strength is based on ANFO being pneumatically charged into 45mm blastholes.

Orica - Nitro
Explosives Manufacturing Co.
Hülya Sokak No 45. 06700
Tel: (0) 312 446 1600 PBX
Fax: (0) 312 865 19 63 PBX
Cumhuriyet V.D 631 006 2898
Sermayesi: 314 583 500 000 TL

Gaziosmanpaşa / ANKARA
Fax: (0) 312 446 15 55
Fax: (0) 312 865 1968
Ticaret Sicil No. 98398