



Product Fact Sheet

Magnafrac™

Film Packaged, Detonator-Sensitive Emulsion Explosive

Magnafrac* packaged, detonator-sensitive emulsion explosive, is an ideal underground product for cartridge loading in narrow-vein mining or in areas where bulk explosives loading is not economical. **Magnafrac** gives high shock energy for rock breaking and minimum throw for less mixing of ore grades. It is a good primer in small-diameter holes pneumatically loaded with **Amex*** blasting agent.

Features

Packaged Magnafrac emulsion explosive is:

- An emulsion formulation - highly efficient explosive reaction;
- Sticky - ideal for cartridge loading applications;
- Specifically formulated for underground use;
- Packaged in easy to tamp plastic film for excellent borehole coupling;
- A high shock energy explosive;
- Made to tight diameter control specifications;
- Highly water resistant - minimal leaching;
- Free of nitroglycerin - no headaches.

Benefits

Magnafrac emulsion explosive in film cartridges:

- Reduces potential for sulphide dust ignitions;
- Loads with up to 95% compaction in up-holes up to 115 mm (4½ in) diameter with minimum fall out;
- Reduces post-blast fumes and improves turnaround time;
- Has the potential to expand drill pattern;
- Gives excellent fragmentation with minimum throw; good priming for **Amex** in small-diameter pneumatically loaded holes;
- Maximizes cartridge loader performance;
- Reduces environmental concerns;
- Improves labor efficiency.



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Properties

Magnafrac	32 x 400 mm (1¼ x 16 in)	
Cartridge Density (g/cc)	1.11	
Velocity of Detonation†	5 000 m/s (16,400 ft/s)	
Water Resistance	Excellent	
Relative Effective Energy (REE) [§]	Relative Weight Strength (RWS)	91
	Relative Bulk Strength (RBS)	120
Fume Class	1	

† unconfined at 5°C (41°F)

§ The "Relative Effective Energy" (REE) of an explosive is the energy calculated to be available to do effective blasting work. All energy values are calculated using the **IDeX*** computer code owned by Orica for the exclusive use of its companies. Energy values are based on standard ANFO with a density of 0.84 g/cc and a cutoff pressure of 100 MPa. Other computer codes may give different values.

Priming

When the internal temperature is higher than -15°C (5°F), initiate with a high-strength detonator. At temperatures below -15°C (5°F), a Stinger booster or a **Pentex*** booster are recommended.

Note: Detonating cord may adversely affect the performance of **Magnafrac** and could result in misfires. Consult an Orica representative before attempting to use with detonating cord.

Shelf Life

One year from time of manufacture.

Packaging

Magnafrac packed in PMP plastic is tappable, offers good coupling in the borehole and is ideal for cartridge loading.

Standard Sizes

Size	Cartridge Count [^]	Packaging
25 x 300 mm (1 x 12 in)	156-166	PMP
25 x 400 mm (1 x 16 in)	118-124	PMP
32 x 400 mm (1¼ x 16 in)	77-82	PMP
90 x 200 mm (3 ½ x 8 in)	18	Valeron

Other sizes may be available by special arrangement.

[^] 25 kg (55 lb) case

Storage

Detonator-sensitive **Magnafrac** is best stored at temperatures above -15°C (5°F). This is especially important in cold weather "load-and-shoot" worksites where there is insufficient in-hole warm-up time.

Before it can be used with a pneumatic cartridge-loading machine, the internal temperature of detonator-sensitive **Magnafrac** should be 0°C (32°F) or higher.

Avoid sudden and extreme changes in temperature.

Hazardous Materials Shipping Description

Explosive, Blasting, Type E,
Class and Division 1.1D,
UN 0241, PG II

EX 9808193 (50mm and below)

EX 9808195 (greater than 50mm)

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