

# Apex™ Super 2000



## Description

Apex™ Super 2000 is a high strength, robust, booster sensitive watergel explosive designed for surface and underground blasting. The explosive is white in color with a gelatine-like consistency.

## Application

Apex™ Super 2000 is effective where a light density explosive for low energy and large diameter wall control is required.

## Key Benefits

- Apex™ Super 2000 has excellent hydrostatic pressure resistance making it suitable for deep, wet blastholes.
- Apex™ Super 2000 reduces post-blast fumes and improves turnaround time.
- Apex™ Super 2000 is highly water resistant, which minimizes leaching and reduces environmental impact.
- Apex™ Super 2000 consistency allows for it to be cut in order to suit the specific application.
- OH&S issues around the handling and storage of nitroglycerin are eliminated.
- Fume Class 1 – suitable for underground use.

## Technical Properties

Apex™ Super 2000	
Cartridge Density	1.05 g/cc
Velocity of Detonation <sup>1</sup>	4,000 m/s 13,000 ft/s
Water Resistance	Excellent
Fume Class	1
Relative Effective Energy (REE) <sup>2</sup>	Relative Weight Strength (RWS) 95
	Relative Bulk Strength (RBS) 120

## Packaging

Apex™ Super 2000 is distinctively packaged in green plastic film, to clearly differentiate it from detonator sensitive packaged explosives. Standard cartridge sizes are as follows:

Size		Weight	
90 x 400 mm	3 ½ x 16 in.	2.64 kg	5.81 lb

## Recommendations for Use

### Blasthole Depth

Apex™ Super 2000 is suitable for use in holes of any practical depth providing contained water does not exceed 50 m depth.

### Priming and Initiation

Apex™ Super 2000 is a booster sensitive watergel explosive and must be in direct contact with an appropriately sized Pentex™ booster that is 454 g (1 lb) or larger. Use of detonating cord with Apex™ Super 2000 is not recommended as it will reduce the energy of the explosive and may result in misfires.

### Charging

Cartridges may be placed into blastholes intact or, where maximum energy is required, may be slit or cut prior to loading to achieve desired loading density. Care should be taken when loading slit or cut cartridges into wet blastholes as the explosive could bridge at the air-water interface.

### Sleep Time Within Blastholes

The sleep-time in a blasthole is influenced by the extent of damage to the packaging and by the nature of any water present. Apex™ Super 2000 will give good performance after two weeks immersion. Sleep times may vary depending on ground conditions.

## Apex™ Super 2000

### Storage And Handling

#### Product Classification

Authorized Name:	Apex™ Super 2000
Proper Shipping Name:	Explosive, blasting, type E
Classification:	1.1D
UN No:	0241
Packing Group:	II
EX Number:	2007110145

All regulations pertaining to the handling and use of such explosives apply.

#### Storage

Store Apex™ Super 2000 in a suitably licensed magazine for Class 1.1D explosives. The cases should be stacked in the manner designated on the case.

Apex™ Super 2000 has a **shelf life** of up to 2 years in an approved magazine, even in hot and humid extremes.

Apex™ Super 2000 is best stored at temperatures between 10-32°C (50-90°F). Do not expose Apex™ Super 2000 to temperatures greater than 40° C (104° F).

#### Transport

Apex™ Super 2000 should be transported between 10-32°C (50-90°F). Do not expose sealed containers to temperatures above 40°C (104°F).

For recommended good practices in transporting, storing, handling, and using this product, refer to the "Always and Never" booklet packed inside each case.

#### Disposal

Disposal of explosives materials can be hazardous. Methods for safe disposal of explosives may vary depending on the user's situation. Please contact a local Orica representative for information on safe practices.

#### Safety

The post detonation fume characteristics of Apex™ Super 2000 make the product suitable for both underground and surface blasting applications. Users should ensure that adequate ventilation is provided prior to re-entry into the blast area.

Apex™ Super 2000 can be initiated by extremes of shock, friction or mechanical impact. As with all explosives, Apex™ Super 2000 should be handled and stored with care and must be kept clear of flame and excessive heat.

#### Trademarks

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# Apex™ Super 2000

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## Emergency Contact Telephone Numbers

For chemical emergencies (24 hour) involving transportation, spill, leak, release, fire or accidents:

**Canada:** Orica Canada emergency response **1-877-561-3636**

**USA:** Chemtrec **1-800- 424-9300**

For lost, stolen or misplaced explosives:

**USA:** BATFE **1-800-800-3855**. Form ATF F5400.0 must be completed and local authorities (state / municipal police, etc) must be advised.

## Notes

1. Unconfined at 5°C (41°F). VOD will depend on application including explosive density, blasthole diameter, and degree of confinement. The VOD range is based on minimum unconfined and calculated ideal.
2. 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 cut-off pressure of 100Mpa. Other computer codes may give different values.