Technical Data Sheet

The Power of Partnership

Dynashear™

Description

Dynashear™ is specifically formulated ammonia dynamite.

Application

Dynashear™ is a specialty product formulated for use in the surface dimension stone industry.

Key Benefits

- *Dynashear*™ ammonium dynamite is less hazardous to use than black powder.
- *Dynashear*™ has a high gas volume - low detonation velocity.
- *Dynashear*™ is economical to use and minimizes hairline cracking.

Technical Properties

Dynashear™		
Cartridge Density (g/cc)		0.75
Velocity of Detonation[1]		1,700 m/s 5,500 ft/s
Water Resistance		Poor
Fume Class		*
Relative Effective Energy (REE) [2]	Relative Weight Strength (RWS)	46
	Relative Bulk Strength (RBS)	41

* *Dynashear*™ is not rated Fume Class 1. If *Dynashear*™ is to be used underground, adequate ventilation and gas monitoring is required prior to re-entry. Please consult an Orica Technical Representative for more information.

Packaging

Dynashear™ is packaged in spiral wound paper shells.
Standard product sizes are as follows:

Size (mm)	Size (in)	Cartridge / Case	Paper Type
22 x 200	7/8 x 8	200	Spiral Wound
22 x 300	7/8 x 12	150	Spiral Wound
32 x 200	1 ¼ x 8	88	Spiral Wound

Recommendations for Use

Priming and Initiation

Use a high strength detonator or *Cordtex*™ *18* or higher coreload detonating cord.

Charging

In small diameter blastholes the maximum energy per meter of blasthole can be achieved by tamping the explosive with a wooden tamping rod appropriate to the hole diameter. No metal instrument should be used to tamp explosives. The primer cartridge containing a detonator must not be tamped.

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.

Storage and Handling

Product Classification

Authorized Name: *Dynashear*™
Proper Shipping Name: Explosive, blasting, type A
Classification: 1.1D
UN No: 0081
Packing Group: II
EX Number: 1993070076

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

Storage

Store *Dynashear*™ in a suitably licensed magazine for Class 1.1D explosives. Dynamite that is stored under warm, wet, and/or humid conditions can deteriorate quickly, minimizing shelf life. *Dynashear*™ is best stored at temperatures above -15°C (5°F).

Dynashear™ has a storage **shelf life** of up to 12 months from manufacture date in a well ventilated, approved high explosive magazine.

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

Transport

Dynashear™ should be transported between -15°C (5°F) and +30°C (86°F).

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

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

Trademarks

Disclaimer

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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.

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Notes

1. Unconfined at 5ºC (41ºF). 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.