

Eurodyn™ 2000

Description

Eurodyn™ 2000 explosive dynamite is nitroglycerine based, high strength, detonator sensitive explosive. The explosive is red in colour with a firm putty-like consistency.

Application

Eurodyn™ 2000 can be used in priming applications, as a high-density column explosive. *Eurodyn™ 2000* delivers exceptional results in hard rock applications.

Eurodyn™ 2000 is designed for use in surface mining, quarrying and construction, tunnelling and underground blasting.

Key Benefits

- *Eurodyn™ 2000* is a high energy explosive dynamite with excellent energy transmission qualities for outstanding blast results in the toughest ground.
- *Eurodyn™ 2000* is suitable for use in confined blasting and underwater applications.
- *Eurodyn™ 2000* is highly water resistant, which minimises leaching and reduces environmental impact.
- *Eurodyn™ 2000* contains no aromatic nitro compounds (DNT and TNT), which are considered to be carcinogenic.

Recommendations for Use

Blasthole Depth

Eurodyn™ 2000 is suitable for use in holes of any practical depth providing contained water does not exceed 30 m depth.

Priming and Initiation

An *Exel™* or *i-kon™* detonator can reliably initiate *Eurodyn™ 2000*. If ignited with a *Cordtex™* detonating cord, the cord must have a minimum filling weight of 5 g PETN/m and be led over the entire length of the charging pillar.

Charging

In small diameter blastholes 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.

Technical Properties

| Product | <i>Eurodyn™ 2000</i> |
|--|----------------------|
| Density (g/cm ³) ⁽¹⁾ | 1.4 |
| Minimum Cartridge Diameter (mm) | 22 |
| Hole Type | Wet and Dry |
| Typical VOD (m/s) ⁽²⁾ | 6200 ±200 |
| Relative Effective Energy (REE) ⁽³⁾ | |
| Relative Weight Strength (%) | 145 |
| Relative Bulk Strength (%) | 254 |
| CO ₂ Output (kg/t) ⁽⁴⁾ | 258 |

Sleep Time within Blastholes

In dry blastholes, given the explosives packaging is undamaged; *Eurodyn™ 2000* may be charged and fired several months later. If the explosives packaging are damaged, the sleep-time in a blasthole is influenced by the extent of damage to the packaging and by the nature of any water present.

Ground Temperature

These products are available for use in ground temperatures -20 °C to a maximum of 50 °C. If your application requires you to operate outside this temperature range please contact your local Orica Account Manager.

Packaging

Eurodyn™ 2000 is paper wrapped or packaged in clear film, differentiating it from other packaged explosives. Standard cartridge sizes are as follows:

| Diameter (mm) | Nominal Length (mm) | Nominal Mass (g) | Cartridge per box (items) | Box content (kg) |
|---------------|---------------------|------------------|---------------------------|------------------|
| 25 | 180 | 125 | 200 | 25 |
| 25 | 380 | 250 | 100 | 25 |
| 30 | 380 | 400 | 60 | 24 |
| 38 | 380 | 625 | 40 | 25 |
| 50 | 680 | 2000 | 12 | 24 |
| 60 | 700 | 3000 | 8 | 24 |
| 65 | 500 | 2500 | 10 | 25 |
| 72 | 680 | 4000 | 6 | 24 |
| 80 | 700 | 5000 | 5 | 25 |



Storage and Handling

Product Classification

Authorised Name: Eurodyn™ 2000
 Shipping Name: Explosive, Blasting, Type A
 UN number: 0081
 Classification: 1.1D
 EC Type Certificate: 080.EXP.97.0145
 Identification Number: BAM-GN-061

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

Storage

Store Eurodyn™ 2000 in a suitably licensed magazine for Class 1.1D explosives. The cases should be stacked in the manner designated on the cases. Eurodyn™ 2000 has a storage life of up to 12 months in an approved magazine.

Eurodyn™ 2000 is best stored at temperatures between 0 °C and +30 °C. This is especially important in cold weather “load and shoot” worksites where there is insufficient inhole warm-up time.

Transport

Eurodyn™ 2000 should be transported between 0 °C and +50 °C.

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 Eurodyn™ 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.

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

- Not for sites with danger of fire damp or coal dust explosion.

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Disclaimer

Explosives based on nitroglycol such as Eurodyn™ 2000 may react with pyritic materials in the ground and create potentially hazardous situations. Orica accepts no responsibility for any loss or liability arising from use of the product in ground containing pyritic or other reactive material. The manufacturer reserves the right to modify products without prior notice. All information contained in this data sheet is accurate and up-to-date as at the issue date specified below. Since Orica cannot anticipate or control the conditions under which this information and its products may be used, each user should review the information in the specific context of the intended application. To the maximum extent permitted by law, Orica will not be responsible for damages of any nature resulting from the use of or reliance upon the information in this data sheet. No express or implied warranties are given other than those implied mandatory by law.

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Notes

1. Nominal Density Only.
2. 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.
3. REE is the Effective Energy relative to ANFO at a density of 0.8 g/cm³. ANFO has an effective energy of 2.30 MJ/kg. Energies quoted are based on ideal detonation calculations with a 100 Mpa cut off pressure. Non-ideal detonation energies are also available on request. These take account of blasthole diameter, rock type and explosive reaction behaviour.
4. Carbon Dioxide is the main greenhouse gas produced. The output is calculated assuming ideal detonation.

