BlastHi-T™

Ammonium Nitrate & Viscous Oil







Description

BlastHi-T is suitable for use in ground with a temperature of 0°C to a maximum of 55°C and in elevated temperature ground up to 100°C when used in conjunction with appropriate site specific procedures. For applications in ground with temperatures outside this range, contact your Dyno Nobel representative.

BlastHi-T is a nominal 94:6 (wt%) blend of porous ammonium nitrate prill (Detaprill®) and viscous mineral oil. It is a dry, free flowing bulk explosive; formulated for use in ground with elevated temperatures.

BlastHi-T has zero water resistance and has a wide variety of applications for small, medium and large diameter, dry hole blasting in conditions where elevated ground temperatures are encountered.

When pneumatically loaded; BlastHi-T may also be used effectively in underground development and tunnelling applications.

BlastHi-T provides excellent heave energy compared with explosives that contain a high emulsion content.

The low bulk density of BlastHi-T provides excellent charge distribution throughout the blast hole.

Properties		
	Poured	Blow Loaded
Density (g/cm ³) ¹	0.82	0.95
Min Diameter (mm)	75	25
Energy (MJ/kg) ²	3.7	3.7
Typical VOD (m/s) ³	2500 – 4500	2000 – 4000
RWS ⁴	100	100
RBS ⁵	100	116

NOTES.

- 1. Values are indicative average densities only, determined under laboratory conditions by Dyno Nobel technical personnel at Dyno Nobel's Mt Thorley Technical Centre. Observed densities may differ or vary under field conditions. Nominal in hole density only.
- 2. All Dyno Nobel energy values are calculated using a proprietary Dyno Nobel thermodynamic code Prodet. Other programs may give different values.
- 3. These results represent a range of VODs collected from numerous Dyno Nobel blast sites throughout the Asia Pacific region over a period of time. The velocity of detonation actually recorded in use is dependent upon many factors, including: the initiation system used, the product density, blast hole diameter and ground confinement. The values stated are typical of those recorded for the product in various hole diameters, densities and ground types, and may not be achievable under all circumstances.
- 4. Relative Weight Strength (RWS) and Relative Bulk Strength (RBS) are determined using a density of 0.82g/cm³ and an energy of 3.7MJ/kg for ANFO.
- 5. RBS depends on the final density of the product at the time of loading.



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Technical Information

Recommendations

Priming Requirements – It is recommended that BlastHi-T should be primed with a cast booster for all hole diameters. Depending on the application, BlastHi-T may be primed with a suitable diameter detonator sensitive cartridge explosive (Powermite® Pro). For specific priming requirements, please contact your Dyno Nobel representative.

Additional boosters should be used when the column height exceeds 10 to 15 meters or where there is risk of column disruption.

Ground Temperature – BlastHi-T is suitable for use in ground with a temperature of 0°C to a maximum of 55°C and in elevated temperature ground up to 100°C when used in conjunction with appropriate site specific procedures. For applications in ground with temperatures outside this range, contact your Dyno Nobel representative.

Reactive Ground Conditions – BlastHi-T is not designed for use in conditions where reactive sulphides are present.

Maximum Hole Depth - BlastHi-T can be detonated successfully in depths up to 75m.

Sleep Time – Under normal conditions in dry and stemmed blast holes, BlastHi-T may be slept for periods up to six (6) weeks. The sleep time may be limited to the recommended sleep time of the initiating system. The presence of water will dramatically reduce the sleep time. For applications where unusual or specific conditions exist please consult your local Dyno Nobel representative for advice.

Shelf Life – BlastHi-T has a maximum shelf life of six (6) months dependent on temperature and humidity conditions. Storage in a high humidity and high temperature environment will accelerate product breakdown and should be avoided. Signs of BlastHi-T degradation are hardening or caking which can lead to difficulty in loading and as a result, may lead to poor blasting performance.

Packaging – BlastHi-T is available in packaged form. Bags sizes available – 10kg, 20kg, 25kg and 500kg.

All bags are delivered on 1 tonne product only weight pallets – 2x 500kg, 100x 10kg, 50x 20kg or 40x 25kg plastic bags per pallet.

Dangerous Goods Classification

Product Name: BlastHi-T

Correct Shipping Name: Explosive, Blasting, Type E

UN Number: 0082 **DG Class:** 1.1D



Safe handling, transportation and storage

First Aid – You can find detailed first aid information on the relevant Dyno Nobel Safety Data Sheet. Refer to www.dynonobel.com for more information if required.

Safety - All explosives are classified as dangerous goods and can cause personal injury and damage to property if used incorrectly.

Transportation and Storage - All explosives must be handled, transported and stored in accordance with all relevant regulations. Stock should be rotated such that older product is used first.

Remember, the explosive products discussed in this document should only be handled by persons with the appropriate technical skills, training and licences.

While Dyno Nobel has made every effort to ensure the information in this document is correct, every user is responsible for understanding the safe and correct use of the products. If you need specific technical advice or have any questions, you should contact your Dyno Nobel representative.

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March 2012 VERSION 4

