

TECHNICAL DATA SHEET

HiDEX™ – Heavy ANFO Bulk Products



Description

HiDEX™ products are a range of high energy bulk emulsion products for use in both dry and dewatered blasthole applications. A blend of Ammonium Nitrate and a high-energy emulsion, HiDEX™ products are ideal for use in dry blasthole applications where optimum fragmentation and movement are desirable.

Features & Benefits

HiDEX™ products have been developed to provide the following features and benefits:

- High density emulsion provides greater range of available densities;
- formulation of the HiDEX™ range delivers high heave results from lower density blends compared with conventional Heavy ANFO products, reducing the total cost of mining;
- productive auger delivery and high blasthole loading efficiency.

Usage Instructions

HiDEX™ products are ideally suitable for loading into dry blastholes. Please contact your Hanwha technical representative for application in dewatered blastholes.

Priming Requirements

The minimum primer recommended for use with HiDEX™ products is a 400g cast booster. For advice on the use of alternative primers, please contact your Hanwha technical representative. Where ground conditions may result in product column dislocation during blasting, additional primers are recommended to ensure complete initiation of the bulk product.

Charging Length

HiDEX™ products are suitable for loading into blast holes up to 45 metres in depth. Blasthole diameter, inclination and presence of water will impact on suitability of the selected product for a specific application. Please contact your Hanwha technical representative for further information.

Sleep Times

Under ideal conditions, the maximum recommended sleep time for HiDEX™ products is 28 days. However, site conditions such as groundwater may affect this period. Please contact your Hanwha technical representative for specific applications.

Technical Data

HiDEX™ Heavy ANFO Bulk Products					
Name	HiDEX™10	HiDEX™20	HiDEX™25	HiDEX™30	HiDEX™40
Product Blend (Emulsion : ANFO)	10 : 90	20 : 80	25 : 75	30 : 70	40 : 60
Effective Energy (MJ/kg)	2.53	2.59	2.68	2.69	2.79
Relative Weight Strength (%)	103	106	109	110	114
Relative Bulk Strength (%)	116	132	150	158	188
Velocity of Detonation (km/s)	4.0 - 4.6	4.0 - 4.6	4.0 - 4.7	4.0 - 4.7	4.0 - 5.2
Nominal Density Range (g/cm ³)	0.85 - 0.94	0.95 - 1.05	1.05 - 1.13	1.10 - 1.21	1.28 - 1.35
Minimum Hole Diameter (mm)	100	115	140	140	152
Water Resistance	None	Poor	Poor	Poor	Moderate
Recommended Maximum Sleep Time (Dry)	28 days	28 days	28 days	28 days	28 days
Suitable for (Dry/Dewatered)	Dry	Dry	Dry	Dry	Dry/Dewatered
Delivery Method	Auger	Auger	Auger	Auger	Auger

1. Energy values and relative strengths are calculated using ideal detonation modelling (for reference, ANFO = 2.45MJ/kg).
2. Velocity of Detonation (VoD) values are approximate only and may vary according to site conditions.
3. Product density values are indicative only and may vary according to component density, charge length and site conditions.

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Elevated Temperatures

Please contact your Hanwha Technical representative prior to use of HiDEX™ products in blastholes that are defined as elevated temperature (greater than 55°C).

Reactive Ground

HiDEX™ products are not suitable for loading in blastholes that are defined as reactive, according to the AEISG Code of Practice for Elevated Temperature and Reactive Ground.

Hazard Classification

UN No. (Class / Division)	0241 / 1.1D
Proper Shipping Name	EXPLOSIVE BLASTING, TYPE E
Packing Group	II
Hazchem Code	E
EMS	F-B, S-X

Safety

When using HiDEX™ products avoid contact with eyes or skin and wash hands thoroughly after handling. Keep HiDEX™ products away from sources of heat, sparks, flame or hot surfaces and avoid mixing with combustibles or incompatible materials.

Handling Instructions

HiDEX™ products are available in bulk and are manufactured on site using Mobile Processing Units (MPU).

Storage

All explosives are classified as Dangerous Goods and must be stored and secured in accordance with relevant local and national regulations.

Disclaimer

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The use of Product is an intrinsically dangerous activity and must be restricted to qualified and trained users in possession of any necessary permits and licenses, and comply at all times with appropriate safety and risk prevention measures and with applicable laws.

This document and any accompanying information is not intended to constitute – and shall not be construed as – an offer or contractual commitment on Hanwha's side. For further information about Hanwha Products, please contact your distributor or sales representative directly.

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