

DYNO[®] ANFO HS

Technical
Information



Booster Sensitive Explosive for Reactive Ground



Product Description

DYNO ANFO HS is a prilled ammonium nitrate/fuel oil based explosive mixture specifically formulated with a special additive for use in reactive, pyritic high sulphide ground with dry borehole conditions. It is available packaged in 25kg bags. DYNO ANFO HS can be used in both surface and underground blasting applications.

Application Recommendations

- DYNO ANFO HS is not recommended for wet borehole conditions. Consult your Dyno Nobel representative regarding applications involving borehole dewatering and plastic borehole liners.
- DYNO ANFO HS has a shelf life of 3 months from date of manufacture when stored at temperatures between -17° C and 32° C (0° F and 90° F).
- **ALWAYS** use an adequately sized, high-impulse, high detonation velocity, cap sensitive explosive or cast booster to prime DYNO ANFO HS.
- When two primers are necessary, place one near the bottom and one near the top of the main charge in the borehole. Additional primers should be used whenever the blaster feels that separations or blockages may have occurred as the borehole is being loaded. It is imperative that all primers in the borehole be either threaded onto a detonating cord downline or upline or be individually primed with a detonator connected to the blast circuit at the surface.
- Use of detonating cord in boreholes with DYNO ANFO HS can cause loss of energy, especially where high coreload detonating cords are used in smaller diameter holes. High coreload detonating cords may initiate DYNO ANFO HS at low order. Where detonating cord is used to initiate Nonel SL detonators, use lowest recommended coreload detonating cord.

Properties

SDS
#1010

	Poured	Pneumatic
Density (g/cc) Avg	0.85	0.95
Energy^a cal/g (cal/cc)	862 (705)	862 (705)
Relative Weight Strength^b	1.00	1.00
Relative Bulk Strength^b	1.00	1.16
Velocity^c m/sec (ft/sec)	4,000 (13,120)	4,000 (13,120)
Detonation Pressure^c (Kbars)	31	31
Gas Volume^a (moles/kg)	43	43
Water Resistance	None	None
Fume Class	IME1	IME1
Minimum Hole Diameter (mm)	50	25

^a All Dyno Nobel Inc. energy and gas volume values are calculated using PRODET™, the computer code developed by Dyno Nobel Inc. for its exclusive use. Other computer codes may give different values.

^bANFO = 1.00 @ 0.82 g/cc

^cConfined @ 100 mm (4 in) diameter @ 4°C

Hazardous Shipping Description

Explosive, Blasting, Type B, 1.5D, UN 0331, II OR
Ammonium Nitrate, Fuel Oil Mixture, 1.5D, NA 0331, II



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Transportation, Storage and Handling

- DYNO ANFO HS contains a high percentage of industrial-grade ammonium nitrate prills which are susceptible to breakage from temperature cycling, humidity and mechanical handling. Temperature cycling and humidity may cause packaged product to harden and material stored in bulk bins to increase in fines, cake and lump.
- For recommended good practices in transporting, storing, handling and using this product, see the Safety Library Publications of the Institute of Makers of Explosives.
- Explosives must be transported, stored, handled and used in conformity with all applicable federal, state, provincial and local laws and regulations.

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