

DYNO[®] Xtra

Technical Information



Small Diameter Detonator Sensitive Emulsion



Product Description

DYNO XTRA is a specialty, detonator sensitive emulsion explosive engineered to meet the demands of close borehole blasting and is resistant to dead pressing. Dyno Nobel patented technology allows delay sequencing of 25 ms without loss of sensitivity resulting from the detonation of charges in adjacent boreholes. DYNO XTRA is designed to retain its performance characteristics even when the package is split and slept in wet holes for extended periods of time.

Application Recommendations

- Package diameter and type affect product density. Use cartridge count to determine actual explosive charge weight.
- DYNO XTRA will perform in temperatures from -20° to +50° C (-4° to 122° F). At internal product temperatures higher than -18° C (0° F), **ALWAYS** use a Dyno Nobel high strength detonator or equivalent. At internal product temperatures below -18° C (0° F) and higher than -23° C (-10° F), **ALWAYS** use an 10 g or larger cast booster. For internal product temperatures below -23° C (-10° F), consult your Dyno Nobel representative for the recommended cast booster size.
- Use with detonating cord is not recommended. Consult your Dyno Nobel representative for details.

Properties

MSDS
#1030

	Chub/Plastic	Paper
Density (g/cc) Avg	1.17	1.11
Energy^a (cal/g)	825	800
(cal/cc)	965	890
Relative Weight Strength^{a,b}	0.94	0.91
Relative Bulk Strength^{a,b}	1.34	1.24
Velocity^c (m/s)	4,900	4,900
(ft/s)	16,100	16,100
Detonation Pressure^c (Kbar)	70	67
Gas Volume^a (moles/kg)	37	37
Fume Class	IME1 & NRCan1 ^d	No Underground
Shelf Life Maximum	1 year (from date of production)	
Maximum Water Depth	30 m (100 ft)	
Water Resistance	Excellent	

^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.

^b ANFO = 1.00 @ 0.82 g/cc

^c Unconfined @ 50 mm (2 in) diameter

^d Approved by Natural resources Canada as Fume Class 1 in chub/PMP packaging only.

Hazardous Shipping Description

Explosive, Blasting, Type E, 1.1D, UN 0241 II





Transportation, Storage and Handling

- DYNO XTRA must be transported, stored, handled and used in conformity with all applicable federal, state, provincial and local laws and regulations.
- Packaged emulsions have a shelf life of one (1) year when stored at temperatures between -18° C and 38° C (0° F and 100° F). Explosive inventory should be rotated. Avoid using new materials before the old. For recommended good practices in transporting, storing, handling and using this product, see the booklet “Prevention of Accidents in the Use of Explosive Materials” packed inside each case and the Safety Library Publications of the Institute of Makers of Explosives.

Packaging

Diameter x Length		Case Quantity	Case Weight		Net Explosive Weight	
mm	in		kg	lbs	kg	lbs
25 x 300	1 x 12	120	19.0	42	0.15	0.33
32 x 400	1 1/4 x 16	54	19.0	42	0.34	0.75
40 x 400	1 1/2 x 16	37	19.0	42	0.49	1.08
50 x 400	2 x 16	18	18.0	40	0.96	2.12
57 x 400	2 1/4 x 16	14	18.0	40	1.19	2.62
65 x 400	2 1/2 x 16	12	19.0	42	1.47	3.24
75 x 400	3 x 16	8	18.0	40	2.08	4.59

- DYNO XTRA is available in a wide variety of sizes. Custom sizes are subject to surcharge and may require longer than usual lead times.
- Note: All weights are approximate.
- Production variations will occur. The charts should be used only as a guide.
- Package densities will vary with package types.

Case Dimensions

44 x 36 x 25 cm 17.5 x 13.875 x 9.75 in

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