TECHNICAL DATA SHEET

PACKAGED EXPLOSIVES

DYNO® AP

Small Diameter Detonator Sensitive Emulsion

Properties

SDS #1030

		DYNO AP	DYNO AP PLUS
Density	(g/cc) Avg	1.15	1.15
Energy[a]	(cal/g)	775	860
	(cal/cc)	890	990
Relative Weight Strength[a]		0.88	0.98
Relative Bulk Strength[a,b]		1.24	1.38
Velocity[c]	(m/s)	4,700	4,600
	(ft/s)	15,400	15,100
Detonation Pressure[c]	(Kbars)	63	61
Gas Volume[a]	(moles/kg)	41	39
Shelf Life Maximum		1 year (from date of production)	
Maximum Water Depth		90 m (300 ft)	
Water Resistance		Excellent	
Fume Class		IME1[e] & NRCan1[d]	

[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 @ 32 mm (1 1/4 in) diameter
[d] Approved by Natural Resources Canada as Fume Class 1 in chub/PMP packaging only.
[e] DYNO® AP is IME Fume Class 1.

Hazardous Shipping Description
Explosive, Blasting, Type E, 1.1D, UN 0241 II

PRODUCT DESCRIPTION

DYNO AP and DYNO AP PLUS are detonator sensitive, all-purpose, water resistant, packaged emulsion explosives that are recommended for underground drifting, quarry and construction blasting applications in medium rock types.

DYNO AP and AP PLUS are available in the following package types:

- Chub/PMP Film
- Chub/Valeron Film
- Paper Convolute Shell
- Paper Tube Shell

APPLICATION RECOMMENDATIONS

- DYNO AP 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 a 10 gram 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.
- Emulsion explosives are susceptible to “dynamic shock” and may detonate at low order or fail completely when applied in very wet conditions where explosive charges or decks are closely spaced and/or where geological conditions promote this effect. Consult your Dyno Nobel representative for alternate product recommendations when these conditions exist.

Product Disclaimer: Please see reverse side.

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Properties Cont.

Packaging - Chub

Diameter x Length		Case Quantity	Net Explosive Weight*		Net Explosive Weight	
mm	in		kg	lbs	kg	lbs
25 x 300	1 x 12	120	19	42	0.15	0.33
32 x 200	1 ¼ x 8	105	18.6	41	0.17	0.37
32 x 300	1 ¼ x 12	70	19	42	0.26	0.57
32 x 400	1 ¼ x 16	54	19	42	0.34	0.75
38 x 300	1 ½ x 12	50	19	42	0.37	0.81
38 x 400	1 ½ x 16	37	19	42	0.49	1.08
50 x 200	2 x 8	40	19	42	0.45	1.00
50 x 400	2 x 16	18	18	40	0.96	2.12
56 x 400	2 ¼ x 16	14	17	37	1.19	2.62
65 x 400	2 ½ x 16	12	18.6	41	1.47	3.24
75 x 400	3 x 16	8	17.6	39	2.08	4.59

- Package diameter and type affect product density. Use cartridge count to determine actual explosive charge weight. Note: All weights are approximate.
- DYNO AP and DYNO AP PLUS are available in a wide variety of sizes. Custom sizes are subject to surcharge and may require longer than usual lead times.
- Check with your Dyno Nobel representative should you have any questions.

*Add two pounds for Gross Case Weight

TRANSPORTATION. STORAGE AND HANDLING

- DYNO AP and DYNO AP PLUS 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 - Paper

Diameter x Length		Nominal Cartridge Count per Case
mm	in	
32 x 200	1 ¼ x 8	109
32 x 300	1 ¼ x 12	70
32 x 400	1 ¼ x 16	57
38 x 300	1 ½ x 12	51
38 x 400	1 ½ x 16	38
50 x 200	2 x 8	42
50 x 400	2 x 16	21
65 x 400	2 ½ x 16	13
75 x 400	3 x 16	8

Case Dimensions

44 x 35 x 20 cm 17.25 x 13.875 x 7.875 in

ADDITIONAL INFORMATION – Visit dynonobel.com for Brochures and Case Studies related to this product.

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