



### Extra Gelatin Nitroglycerin Dynamite



#### Product Description

UNIMAX is an extra gelatin dynamite formulated to consistently deliver high detonation velocity and excellent water resistance. UNIMAX is designed to satisfy the vast majority of explosive applications in hard rock and may be used as the main explosive charge where high density and energy is required or as a primer for ANFO.

#### Application Recommendations

- UNIMAX is an excellent primer for Dynamix (ANFO), Dynamix-WR (WR ANFO) or other detonator sensitive packaged product and can be used as a secondary primer in hard seams or at the top of the explosive column.
- Minimum diameter is 25 mm (1 in).
- Minimum detonator is No. 8 strength.
- Storage at elevated temperatures and/or high humidity for 1 to 6 months can reduce the performance of Unimax depending on the diameter. Consult your Dyno Nobel representative for specific recommendations.
- Dynamites are susceptible to sympathetic detonation when applied in very wet conditions where boreholes are closely spaced and/or where geological conditions promote this effect. Consult your Dyno Nobel representative for recommendations where these conditions exist.

### Properties

SDS #1019

<b>Density</b> (g/cc) Avg	1.51
<b>Energy<sup>a</sup></b> (cal/g)	1,055
(cal/cc)	1,510
<b>Relative Weight Strength<sup>a</sup></b>	1.20
<b>Relative Bulk Strength<sup>a,b</sup></b>	2.10
<b>Velocity<sup>c</sup></b> (m/s)	5,300
(ft/s)	17,400
<b>Detonation Pressure<sup>c</sup></b> (Kbars)	106
<b>Gas Volume<sup>a</sup></b> (moles/kg)	32
<b>Water Resistance</b>	Excellent
<b>Fume Class</b>	IME1 & NRCan1 <sup>d</sup>

<sup>a</sup> 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.

<sup>b</sup> ANFO = 1.00 @ 0.82 g/cc

<sup>c</sup> Unconfined @ 50 mm (2 in) diameter.

<sup>d</sup> Approved by Natural Resources Canada as Fume Class 1.

#### Hazardous Shipping Description

Explosive, Blasting, Type A, 1.1D, UN 0081 II





### Transportation, Storage and Handling

- UNIMAX must be transported, stored, handled and used in conformity with all applicable federal, state, provincial and local laws and regulations.
- For maximum shelf-life, dynamite must be stored in cool, dry and well-ventilated magazines. Dynamite inventory should always be rotated by using the oldest materials first. 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		Quantity / Case	Nominal Case Weight	
mm	in		kg	lbs
25 x 200	1 x 8	140	20.4	44.8
32 x 200	1¼ x 8	88	20.0	44.0
32 x 400	1¼ x 16	44	20.0	44.0
40 x 200	1½ x 8	60	19.4	42.6
40 x 400	1½ x 16	30	20.5	45.0
50 x 200 <sup>a</sup>	2 x 8 <sup>a</sup>	34	19.3	42.5
50 x 400 <sup>a</sup>	2 x 16 <sup>a</sup>	17	19.3	42.5
60 x 400 <sup>a</sup>	2¼ x 16 <sup>a</sup>	13	18.1	39.8
65 x 400 <sup>a</sup>	2½ x 16 <sup>a</sup>	10	18.6	41.0
75 x 200 <sup>a</sup>	3 x 8 <sup>a</sup>	16	19.9	43.7
75 x 400 <sup>a</sup>	3 x 16 <sup>a</sup>	8	20.4	44.8
89 x 400 <sup>a</sup>	3½ x 16 <sup>a</sup>	5	18.9	41.8
102 x 400 <sup>a</sup>	4 x 16 <sup>a</sup>	4	19.5	43.1

<sup>a</sup> Available in spiral tube shell with tapered end.

- Note: all weights are approximate.
- Product density is 1.50 g/cc for package diameters less than 50 mm (2 in). Use cartridge count to determine actual explosive charge weight.
- UNIMAX is available in a wide variety of sizes. Custom sizes are subject to surcharge and may require longer than usual lead times.

\*\*Available upon request. Check with your Dyno Nobel representative should you have any questions.

### Case Dimensions

45 x 34 x 17 cm      17¼ x 13⅜ x 6⅝ in

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