

Z Powder

Technical Information



Permissible Extra Gelatin Nitroglycerin Dynamite



Product Description

Z POWDER is an extra gelatin permissible dynamite formulated to meet the requirements of the Mine Safety and Health Administration for use in underground coal mines. It does not readily absorb moisture from the air and remains soft after extended proper storage. Z POWDER is designed specifically to meet the most difficult blasting conditions found in underground coal mines, such as shaft, slope and general mine development work where hard rock and/or extreme water conditions are common.

Application Recommendations

- This product is permissible only if used in accordance with applicable regulations, 30 CFR part 75. These regulations are very detailed and all users should become fully familiar with their content.
- Minimum detonator for permissible application is a bronze shell No. 8 strength.
- 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

MSDS
#1019

Density (g/cc) Avg	1.34
Energy ^a (cal/g)	965
(cal/cc)	1,351
Relative Weight Strength ^a	1.10
Relative Bulk Strength ^{a,b}	1.88
Velocity ^c (m/s)	5,000
(ft/s)	16,400
Detonation Pressure ^c (Kbars)	86
Gas Volume ^a (moles/kg)	33
Water Resistance	Excellent
Fume Class	MSHA Permissible

^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.

Hazardous Shipping Description

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



Z Powder

Technical Information



Transportation, Storage and Handling

- Z POWDER 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.

Diameter x Length		Qty / Case	Nominal Case Weight	
mm	in		kg	lbs
32 x 200	1 1/4 x 8	88	19	42
32 x 300	1 1/4 x 12	55	19	41
32 x 400	1 1/4 x 16	44	19	42

- Z POWDER 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.
- Check with your Dyno Nobel representative should you have any questions.

Case Dimensions

44 x 35 x 18 cm 17 1/8 x 13 5/8 x 7 1/4 in

Product Disclaimer Dyno Nobel Inc. and its subsidiaries disclaim any warranties with respect to this product, the safety or suitability thereof, or the results to be obtained, whether express or implied, INCLUDING WITHOUT LIMITATION, ANY IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE AND/OR OTHER WARRANTY. Buyers and users assume all risk, responsibility and liability whatsoever from any and all injuries (including death), losses, or damages to persons or property arising from the use of this product. Under no circumstances shall Dyno Nobel Inc. or any of its subsidiaries be liable for special, consequential or incidental damages or for anticipated loss of profits.

Dyno Nobel Inc.

2650 Decker Lake Boulevard, Suite 300, Salt Lake City, Utah 84119 USA
Phone 800-732-7534 Fax 801-328-6452 Web www.dynonobel.com

DYNO
Dyno Nobel

Groundbreaking Performance™