



POWERMITE®

Cap Sensitive Explosive

PROPERTIES

POWERMITE®

Density (g/cm ³)	1.12 - 1.18
Energy ^a (MJ/kg)	3.09
Energy ^a (KCal/kg)	738
Relative Weight Strength ^b	0.83
Relative Bulk Strength ^{a,b}	1.18
Gas Volume ^a (lt/kg)	941
V.O.D. ^{c,d} (m/s)	3500 - 4500
Detonation Temperature	2361 °C
Water Resistance	Excellent
Shelf Life	6 Months
Extreme Temperature	-10 °C to +40 °C

a All Dyno Nobel energy and gas volume values are calculated using proprietary computer software developed exclusively by Dyno Nobel. Results obtained using alternative software, assumptions, or calculation methodologies may differ.

b ANFO: 1.00 @ 0.81 g/cm³

c 50 mm plastic cartridge min diameter.

d 90 mm plastic cartridge min diameter.

All values may vary by ±%3

HAZARDOUS SHIPPING DESCRIPTION

Explosive, Blasting, Type E, 1.1D UN0241



PRODUCT DESCRIPTION

POWERMITE® is a detonator-sensitive, cartridge emulsion explosive available in diameters ranging from 50 mm to 90 mm, with multiple cartridge weight options. The product is designed for use as a primer in all surface blasting applications. Its high detonation energy and strong shock wave ensure effective and reliable initiation performance.

POWERMITE® features balanced sensitivity characteristics, providing reliable initiation by detonators while maintaining resistance to dynamic shock generated by detonation in adjacent blastholes.



APPLICATION RECOMMENDATIONS

- **ALWAYS** use POWERMITE® as a booster in blastholes with diameters ranging from 76 mm to 162 mm.
- **ALWAYS** ensure POWERMITE® delivers reliable primer performance and consistent initiation energy under demanding surface blasting conditions.
- **ALWAYS** use POWERMITE® in surface blasting operations such as open pit mining, industrial mineral and aggregate quarries, and civil and infrastructure construction projects requiring controlled blast performance.
- **ALWAYS** initiate POWERMITE® with a No.8 strength detonator min 5 g/m detonating cord.
ALWAYS use a wooden skewer to pierce the plastic film before inserting the detonator into the cartridge.
- **ALWAYS** insert the detonator into the POWERMITE® cartridge perpendicular to the rock surface to ensure correct positioning and reliable initiation.
- **NEVER** use the detonator itself to break or pierce the cartridge film.



Product Disclaimer: Please see reverse side.



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DIMENSIONS

Cartridge Diameter mm	Cartridge Length mm	Cartridge Weight g	Cartridges in box	Box Dimensions L x W x H - mm
50	225	500	40	420 x 260 x 240
50	280	625	32	400 x 220 x 285
50	430	1000	20	420 x 260 x 240
60	240	800	25	540 x 180 x 250
60	530	1000	20	540 x 180 x 250
70	235	1000	20	355 x 285 x 255
70	400	2000	10	445 x 160 x 300
90	265	2000	10	355 x 285 x 255

* All cartridge sizes are packed in max **20 kg** boxes.

TRANSPORTATION, HANDLING AND STORAGE

Handling

- Transport the product in full compliance with applicable local and national regulations and official authority directives.
- Prohibit smoking, open flames, sparks, and welding during handling and transportation.
- Ensure that no sources of ignition are present in the handling or transport area.
- Keep the product clean and free from contamination at all times.

Storage

- Store in a cool, dry, and well-ventilated area.
- Storage shall comply with all applicable local and national regulations and authority directives.
- Recommended storage temperature range: -10°C to +40°C.
- Smoking, open flames, sparks, and welding are strictly prohibited in storage areas.
- Do not store together with flammable substances or ignition sources.
- Protect the product from strong mechanical shock.

HAZARDOUS SHIPPING DESCRIPTION

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SAFETY INSTRUCTIONS

- Improper storage, handling, or use of explosives may cause serious harm to humans and the environment.
- All explosives must be stored, handled, and used in full compliance with applicable laws, regulations, and safety standards.

In case of exposure to emulsion explosives:

- **Ingestion:** Do not induce vomiting. Drink 1-2 glasses of water immediately.
- **Eye contact:** Rinse eyes with clean water for at least 15 minutes. Seek medical attention if irritation persists.
- **Skin or clothing contact:** Carefully remove contaminated clothing and ensure it is thoroughly cleaned before reuse.



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

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