



POWERMITE® MAX

Cap Sensitive Explosive

PROPERTIES

POWERMITE® MAX	
Density (g/cm ³)	1.12 - 1.18
Energy ^a (MJ/kg)	3.64
Energy ^a (kCal/kg)	871
Relative Weight Strength ^b	0.93
Relative Bulk Strength ^{a,b}	1.32
Gas Volume ^a (lt/kg)	898
V.O.D. ^c (m/s)	5000
Detonation Temperature	2362 °C
Water Resistance	Excellent
Shelf Life	6 Months
Extreme Temperature ^a	-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 27 mm plastic cartridge min diameter.

* All values may vary by ±%3

PRODUCT DESCRIPTION

POWERMITE® MAX is a detonator-sensitive emulsion explosive product line available in diameters ranging from 27 mm to 45 mm, with multiple cartridge mass options. The product is developed for underground blasting applications across all rock conditions, including very hard rock formations.

POWERMITE® MAX is capable of sustaining continuous detonation across gaps of up to 6 cm between cartridges, ensuring reliable propagation even when cartridge separation occurs due to vibration from adjacent hole detonation. The product exhibits balanced sensitivity characteristics, allowing reliable initiation by detonators while maintaining resistance to dynamic shock generated by nearby blasting activity.

POWERMITE® MAX features a negative oxygen balance, which limits the generation of hazardous NOx gases during detonation and contributes to reduced post-blast ventilation requirements. The product also provides excellent water resistance and delivers consistent performance in both dry and wet blastholes.



HAZARDOUS SHIPPING DESCRIPTION

Explosive, Blasting, Type E, 1.1D UN0241



APPLICATION RECOMMENDATIONS

- **ALWAYS** use POWERMITE® MAX in blastholes with diameters ranging from 32 mm to 55 mm in all underground blasting applications, including underground metal mining and tunneling operations.
- **ALWAYS** apply POWERMITE® MAX as either a booster or main charge depending on blast design requirements.
- **ALWAYS** initiate POWERMITE® MAX with a No.8 strength detonator or min 5 g/m detonating cord.
- **ALWAYS** prefer initiation via the NONELDET® system.
- **ALWAYS** use a wooden skewer to pierce the plastic film before inserting the detonator into the cartridge.
- **ALWAYS** insert the detonator into the POWERMITE® MAX 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.



POWERMITE® MAX

Cap Sensitive Explosives

DIMENSION

Cartridge Diameter mm	Cartridge Length mm	Cartridge Weight g	Cartridges in box	Box Dimensions L x W x H - mm
27	240	160	125	420 x 260 x 240
32	220	200	100	420 x 260 x 240
32	440	400	50	445 x 160 x 300
34	410	400	50	420 x 260 x 240
38	340	400	50	355 x 285 x 255
38	390	500	40	400 x 200 x 285
45	510	1000	20	540 x 180 x 250

* All cartridge sizes are packed in **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.

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.

HAZARDOUS SHIPPING DESCRIPTION

Explosive, Blasting, Type E, 1.1D UN0241



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

Product Disclaimer: Dyno Nobel 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 or any of its subsidiaries be liable for special, consequential or incidental damages or for anticipated loss of profits.