



POWERMITE® MAX AG

Permissible Detonator Sensitive Emulsion Explosive

PROPERTIES

POWERMITE® MAX AG	
Density (g/cm ³)	1.13 - 1.18
Energy ^a (MJ/kg)	2.75
Energy ^a (Cal/g)	658
Relative Weight Strength ^b	0.71
Relative Bulk Strength ^{a,b}	1.01
Gas Volume ^a (lt/kg)	712
V.O.D. ^c (m/s)	4500
Detonation Temperature	2187 °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 50 mm steel pipe.

* All values may vary by ±%3

PRODUCT DESCRIPTION

POWERMITE® MAX AG Series is a cartridge emulsion explosive with a 32 mm diameter, 320 mm cartridge length, and a 300 g cartridge mass. The product is specifically developed for use in underground coal mining applications and is firedamp safe, designed not to initiate methane or coal dust explosions.

The product has undergone extensive testing and has demonstrated reliable performance under methane concentrations of up to 9.8%. POWERMITE® MAX AG features a negative oxygen balance, which prevents the generation of hazardous NOx gases after blasting and contributes to reduced ventilation requirements.

The product also provides inherent water resistance, ensuring consistent effectiveness and reliable performance in both dry and wet blasthole conditions.



APPLICATION RECOMMENDATIONS

- **ALWAYS** use POWERMITE® MAX AG as a feeder charge or main charge in underground coal mining applications with blasthole diameters of 38–64 mm.
- **ALWAYS** apply POWERMITE® MAX AG in underground mining operations with methane risk, including development drifting.
- **ALWAYS** limit the charge to a maximum of three cartridges per blasthole (total charge mass: 900 g).
- **ALWAYS** initiate POWERMITE® MAX AG with a 100% copper shell detonator.
- **NEVER** use detonators made of materials other than 100% copper shell for initiation.
- **NEVER** exceed three cartridges per hole under any operating conditions.

HAZARDOUS SHIPPING DESCRIPTION

Explosive, Blasting, Type E, 1.1D UN0241



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
32	320	300	60	355 x 285 x 255

* All cartridge are packed in **18 kg** boxes.

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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.



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

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