

1. Description

A powdered ammonium nitrate explosive with fine droplets of a low-water-content oxidizer solution or molten oxidizer dispersed in a continuous oil phase of selected carbonaceous fuels and emulsifiers. Under specified process conditions, high-shear emulsification forms a water-in-oil matrix, which is converted to powder by spray drying, spin flash drying, or cooling and solidification followed by pulverization.

Product View



2. Applications

The rock type is widely used in rock blasting and other construction blasting where there is no risk of gas or mine dust explosions. The coal mine permissible types are suitable for environments with gas and coal dust explosion hazards.

3. Key Benefits

Good explosive performance, low bulk density, effective charge coupling and high work capacity make the product suitable for medium to hard rock. Resistance to moisture absorption and caking during storage provides good safety and stability. Combines the characteristics of powdery and gel explosives, with good flowability for different blasthole diameters and some water resistance.

4. Technical Properties

Property	Rock Type	Grade II Coal Mine Permissible Type	Grade III Coal Mine Permissible Type
Cartridge Density (g/cm ³)	0.9±0.05	0.95±0.05	0.95±0.05
Sympathetic Detonation Distance (cm)	≥5	≥5	≥5
Brisance (mm)	≥13	≥10	≥10
VOD (m/s)	≥3400	≥3000	≥2800
Work Capacity (mL)	220-223	190-194	190-194
Hole Type	Dry / Dewatered	Dry / Dewatered	Dry / Dewatered
Delivery System	Manual charging	Manual charging	Manual charging
Relative Weight Strength, RWS (%)	77-78	67-68	67-68
Relative Bulk Strength, RBS (%)	82-93	71-85	71-85
CO ₂ Emissions (kg/t)	160	160	160
Toxic Gas Emission after Explosion (L/kg)	≤70	≤50	≤50
Combustible Gas Safety (g)	-	≥180	≥400
Deflagration Resistance	-	Pass	Pass
Coal Dust-Combustible Gas Safety (g)	-	≥150	≥250
Shelf Life	180 days	180 days	180 days

5. Recommendations for Use

- 01** Select the product appropriate for the operating environment.
- 02** Can be initiated directly with a No. 8 detonator.
- 03** Follow the product instructions strictly.

6. Packaging

Packaging Type	Product Specifications
Cartons or woven bags (bulk)	Cartridges: Ø32 mm, 150 g (cartons); bulk: 25, 30 or 40 kg/bag

7. Storage and Shipping

Product Name	Proper Shipping Name	UN No.	Classification Code
Powdery Emulsion Explosives	Explosives, blasting, type E	0241	1.1D

- 01** Store in a magazine approved for Class 1.1D explosives or higher.
- 02** Store products together only as permitted by the applicable standards.
- 03** Use dedicated transport vehicles that meet the relevant standards for civil explosives.
- 04** Handle with care during shipping, storage and use, and protect against fire and moisture.

8. Precautions

01	Keep large stones and mud from falling into blastholes during loading to avoid affecting detonation propagation and blast performance.	04	Avoid exposure to the open air or direct sunlight during use. Protect against water and moisture.
02	Inspect blastholes before loading to prevent water from causing product failure or poor blast results. Do not use in holes containing substantial water or complex groundwater conditions.	05	In case of accidental fire, use only water or a water-based extinguisher.
03	Blow out blastholes with damp walls before loading to improve reliability and blast performance.	06	If there is a risk of accidental explosion, evacuate immediately and move nearby personnel to a safe area.

9. Safety

- 01** After blasting, personnel may re-enter the blast area only when adequate ventilation has been ensured.
- 02** Impact, friction, mechanical shock and heat may initiate explosives. Exercise extreme care during storage, shipping and use.

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Disclaimer

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