

POLAR Bulk Emulsion Explosive SX & UX

Gas Sensitised Bulk Emulsion Explosives

TECHNICAL DATA SHEET – BULK EXPLOSIVES

POLAR Bulk Emulsion Explosive Surface: SX & Underground: UX

MAXPRIME bulk emulsions are designed for use in all surface and underground mining operations.

Formulation differences ensure that the two variants are ideally suited to the applications encountered in all mining environments.

APPLICATION

POLAR SX is suited to all surface mining operations. Its premium formulation ensures that it will perform exceptionally well in all conditions and rock types.

POLAR UX is specifically formulated for underground applications. It can be used in development blasting as well as production work, including up-holes.

The priming requirements for the products are as follows:

- POLAR SX: Minimum 150gm cast primer
- POLAR UX: Minimum 100gm primer OR 32 x 200mm packaged emulsion cartridge

Polar bulk explosives can be manufactured for use in hot and reactive ground. Please contact Nitro Sibir if you need an inhibited formulation.

Standard formulation POLAR bulk emulsion explosives are for use in ground temperatures up to 55 degrees Celcius.

FEATURES

- Density available between 0.85 to 1.25 g/cc
- Highly water resistant
- Premium materials used in manufacture
- Low water content

PHYSICAL PROPERTIES

Explosive Type: SX	Bulk Emulsion Explosive
Normal Density (g/cc)	0.85 - 1.20
Velocity of Detonation (m/s)	4100 - 4400
Hole Diameter (mm)	76 - 302
Nominal Total Energy (Mi/kg)	2.21 - 2.95
Explosive Class 1.1D	UN Number: UN 0241

PHYSICAL PROPERTIES

Explosive Type: UX	Bulk Emulsion Explosive
Normal Density (g/cc)	0.85 - 1.25
Velocity of Detonation (m/s)	4200 4400
Hole Diameter (mm)	45 - 102
Nominal Total Energy (Mi/kg)	2.21 - 2.95
Explosive Class 1.1D	UN Number: UN 0241

STORAGE AND HANDLING

The emulsion matrix must be stored and transported in accordance with the requirements set out in the regulations mandated in each state. The matrix, whilst classified as an oxidizing agent, is a security risk and must therefore be appropriately stored and transported. Only authorised persons are permitted to handle the emulsion.

All explosives are classified as dangerous goods and can cause injury if not used correctly. Explosives must only be handled by appropriately trained and authorised persons.

First Aid: Please refer to the Safety Data Sheet, Nitro Sibir Ref. BE01, for detailed information on treatment of persons affected by this product.

SHELF LIFE

The matrix has a shelf life of at least six (6) months when stored in ideal conditions.

Gassed explosive products have a shelf life of ten (10) days from the time they are loaded into the blast hole.

DANGEROUS GOODS CLASSIFICATION

Authorised Product Name	POLAR Bulk Explosives, SX and UX
Correct Shipping Name	Explosive, Blasting, Type E
Explosive Class 1.1D	UN Number: UN 0241



TDS: BE01 VERSION: 2.0 LAST UPDATED: 11/14
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