

# POLAR Bulk Emulsion Explosive SXI & UXI

## Gas Sensitised Inhibited Bulk Emulsion Explosives



### TECHNICAL DATA SHEET – BULK EXPLOSIVES

#### POLAR Inhibited Bulk Emulsion Explosive Surface: SXI & Underground: UXI

POLAR inhibited bulk emulsions are specifically formulated with an inhibitor for use in surface and underground mining operations where reactive ground conditions exist. Inhibited product should be used in accordance with procedures developed specifically for site conditions in consultation with Nitro Sibir and the relevant regulatory authority.

#### APPLICATION

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

POLAR UXI 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 SXI: Minimum 150gm cast primer
- POLAR UXI: Minimum 25gm cast primer OR 32 x 200mm packaged emulsion cartridge

Polar inhibited products are formulated to minimise the risks associated with blasting in ground conditions involving elevated temperatures and reactive ground when used in Accordance with the *AEISG Code of Practice: Elevated Temperature and Reactive Ground* and associated site procedures.

#### FEATURES

- High water resistance
- Premium materials used in manufacture
- Low water content

#### PHYSICAL PROPERTIES

Explosive Type: SXI	Bulk Emulsion Explosive
Normal Density (g/cc)	0.85 - 1.20
Velocity of Detonation (m/s)	4400 - 5600
Hole Diameter (mm)	76 - 311
Nominal Total Energy (Mi/kg)	2.21 - 2.95
Explosive Class 1.1D	UN Number: UN 0241

#### PHYSICAL PROPERTIES

Explosive Type: UXI	Bulk Emulsion Explosive
Normal Density (g/cc)	0.60 - 1.25
Velocity of Detonation (m/s)	4800 - 5400
Hole Diameter (mm)	45 - 115
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 sensitive substance and must 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. BE02, 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.

#### DANGEROUS GOODS CLASSIFICATION

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



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