

# POLAR Bulk Emulsion Blends SX & UX

## Bulk Emulsion Blends

### TECHNICAL DATA SHEET – BULK EXPLOSIVES

#### POLAR Bulk Emulsion Blends – Surface (SX) & Underground (UX)

POLAR 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 25gm cast 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 Australia if an inhibited formulation is required.

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

#### FEATURES

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

#### PHYSICAL PROPERTIES

Explosive Type: SX	Bulk Emulsion Blends
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: UX	Bulk Emulsion Blends
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 a class 5.1 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 Emulsion Blends, SX & UX
Correct Shipping Name	Explosive, Blasting, Type E
Explosive Class 1.1D	UN Number: UN 0241



TDS: BE01

VERSION: 4.0

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