

## **TECHNICAL DATA SHEET - BULK EXPLOSIVES**

#### **ANFO**

ANFO is a free-flowing explosive blend of porous prilled ammonium nitrate and fuel oil. It is delivered thorough specialised truck delivery systems or in packaged form. ANFO is formulated to ensure correct oxygen balance while maintaining optimal product sensitivity.

### **APPLICATION**

ANFO has minimal water resistance and is suitable for use in most dry blasting applications. It is not suitable for use in reactive ground conditions. It is a versatile product and can be used in small, medium or large diameter applications.

#### **FEATURES**

Nitro Sibir Australia provides ANFO in bulk through specialised truck delivery systems as well as in 500 kg bags.

This versatile explosive imparts excellent heave energy when compared to products containing a high emulsion percentage.

PHYSICAL PROPERTIES	;	
Hole Type		Dry
Density (nominal) (g/cm <sup>3</sup> )		0.82
Minimum Diameter (mm)		76
Energy (MJ/kg)		3.7
Typical VOD (m/s)		2500-4500
Relative Weight Strength		100
Relative Bulk Strength		100
Explosive Class 1.1D	UN Number: UN 0082	

# **RECOMMENDATIONS**

**Priming** - A cast booster of minimum 150g should ideally be used to prime ANFO in all hole diameters however ANFO may also be primed with a suitable diameter detonator-sensitive cartridged explosive. If in doubt regarding specific priming requirements, contact a Nitro Sibir Australia representative.

In cases where the column height exceeds ten (10) metres, additional boosters should be used.

## **RECOMMENDATIONS** continued...

**Shelf Life** - Under ideal storage conditions, ANFO has a maximum shelf life of six (6) months. High humidity and high temperature environments will accelerate breakdown of the product and should be avoided. Signs that the product may be degrading include hardening or caking which can lead to difficulty in loading and possibly result in poor blasting performance.

**Sleep Time** - Under ideal conditions in dry and stemmed blastholes, ANFO may be slept for up to six (6) weeks. Product sleep time may be limited to that of the initiation system in use. The presence or introduction of water will drastically reduce sleep time.

**Ground Conditions** - ANFO is suitable for use in ground within a temperature range of 0-55°C. It is not suitable for use in conditions where reactive sulphides are present. Ammonium nitrate based explosives may react with pyritic material and create potentially hazardous situations. For applications in ground outside recommended conditions, consult a Nitro Sibir Australia representative.

#### **SAFETY**

**First Aid** - Please refer to the Nitro Sibir Australia Safety Data Sheet for ANFO, Ref PE04.

**Safety** - All explosives are classified as dangerous goods and must be handled and stored with care. Misuse may result in personal injury and/or damage to property. Explosives should only be handled by persons with the appropriate technical skills, experience, training and licences.

**Transportation and Storage** - All explosives must be handled, transported and stored in accordance with all applicable state and federal statutory regulations. Stock should be rotated such that older product is used first.



TDS: Ref BE02

VERSION: 3.0
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LAST UPDATED: 02/20

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