

# PRODUCT INFORMATION BROCHURE

1.5D

## **HEET 100 SERIES**



Products in the **HEET Series** are augured blends of ANFO and emulsion for dewatered blast holes in surface operations.

### **ADVANTAGES**

- Energy and water resistance can be adjusted to meet application demands
- Good fragmentation and excellent shock & heave energy provide easy digging muckpiles
- Increased loading convenience using bulk loading systems
- Pattern expansion when converting from ANFO can reduce costs
- HEET blends with Hydrox (oxidizer ANE) or Hydromite (solid sensitized ANE) provide different blasting properties to meet the needs of the application

#### PRODUCT OVERVIEW

#### **TECHNICAL DESCRIPTION**

Austin Powder's HEET Series of bulk products have the highest energy compared to all other bulk products. The blend percentage is variable depending on the application and blast hole diameter.

#### APPLICATION RECOMMENDATIONS

- Minimum booster: 1/2 lb. cast booster (e.g. Brown Cap DC, Eagle 225, Eagle E\*STAR 50)
- Minimum borehole diameter 4" 5" (100mm 125mm)
- Austin Powder accepts no responsibility for any loss or liability arising from use of this product in ground containing pyritic or other reactive material
- Consult your Austin Powder Technical Representative for advice on all application recommendations

#### **PROPERTIES**

Properties		Value
Density [g/cc]		.92 to 1.32
Oxygen Balance [%] (1)		-1.9 to -4.4
Water Resistance		Good to Excellent
Relative Weight Strength (1)		103 to 113
Relative Bulk Strength (1)		116 to 183
Velocity of detonation (confined) (2)	[ft/s]	16,000 to 23,000
	[m/s]	3,962 to 5,181

Relative properties derived from an ANFO density = 0.82 g/cc @ 100 bar Relative energy values based on ANFO = 100

#### Notes:

- (1) Theoretical values based on Austin modeling which assumes ideal detonation. Values calculated with other codes may differ.
- (2) The velocity of detonation will depend on application, diameter and confinement.

#### **PRIMING**

These products are booster-sensitive explosives and must be in direct contact with an appropriate size cast booster. Additional primers may be required depending upon geological conditions and face height.

#### SHELF LIFE, STORAGE & DISPOSAL

- Store in accordance with all applicable local, state, provincial, and federal laws.
- These products are designed to be used as they are manufactured from the bulk truck.

#### **US DOT REFERENCE NUMBER**

EX-9303283 (Austinite 15) EX-1993050178 (Hydromite 1100)

#### TRANSPORT - UN CLASSIFICATION

Austinite 15

Shipping Name: Ammonium Nitrate - Fuel Oil Mixture

Class & Division: 1.5D ID Number: NA 0331

Hydromite 1100

Shipping Name: Explosive, Blasting, Type E

Class & Division: 1.5D ID Number: UN0332

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