



PRODUCT INFORMATION BROCHURE

5.1 †

HEET SERIES



HEET SERIES (blends of Hydrox S and Austinite 15) are augered products for dry or dewatered blast holes that provide a wide range of energy and water resistance to meet many application requirements.

ADVANTAGES

- Energy and water resistance can be adjusted to meet application demands.
- Good fragmentation and excellent shock & heave energy provide easy digging muckpiles.
- HEET SERIES loading convenience and the potential for expanded patterns can reduce costs
- Increased loading convenience using bulk loading systems.

PRODUCT OVERVIEW

TECHNICAL DESCRIPTION

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

†Hydrox S matrix emulsion are transported and stored as a 5.1 Oxidizer and becomes a 1.5D Blasting Agent after blend with Bulk Austinite 15 during the borehole loading process.

APPLICATION RECOMMENDATIONS

- HEET Bulk: Lower product temperature limit: +5 °C - Higher product temperature limit: +50 °C.
- Austinite 15: Minimum borehole diameter 2" (50 mm).
- HEET Bulk: Minimum borehole diameter 4" (100mm).
- Not for use in hazardous environments where flammable gases or dust may exist.
- Austin Powder Mexico accepts no responsibility for any loss or liability arising from use of the product in ground containing pyritic or other reactive material.
- Consult your Austin Powder Technical Representative for advice on all application recommendations.
- Not for underground use.

PRIMING

These products are non-cap sensitive blasting agent and must be in direct contact a suitable sized cartridge of Emulex 1 or a cast booster for proper initiation

PROPERTIES

Properties		HEET 20 trough HEET 50
Density [g/cc]		0.90 to 1.35
Gas Volume [l/kg]		1062 to 1078
Water Resistance		Good ⁽³⁾ to Excellent ⁽³⁾
Relative Weight Strength ⁽¹⁾		92 -98
Relative Bulk Strength ⁽¹⁾		123 - 138
Velocity of detonation (confined) ⁽²⁾	[ft/s]	11,800 to 14,760
	[m/s]	3600 to 4500
Minimum Hole diameter		4 in/125 mm

Notes:

(1) Theoretical values based on Austin modeling which assumes ideal detonation.

(2) The velocity of detonation will depend on application, diameter and confinement.

‡ Energy values are calculated using Explo 5, a thermo-dynamic computer code employed by Austin Powder Company. Other computer codes may give different values. ANFO = 100 @ 0.82 g/cc.

SHELF LIFE, STORAGE & DISPOSAL

- Store in accordance with all applicable local, state, provincial and federal laws.
- The disposal of explosives needs to comply with local and national laws. Contact Austin Powder with disposal questions.
- These products are designed to be used as they are manufactured from the bulk truck.

TRANSPORT - UN CLASSIFICATION

Austinite 15

Shipping Name: Ammonium Nitrate - Fuel Oil Mixture

Class & Division: 1.5D

ID Number: UN 0331

HEET Series

Shipping Name: Explosive, Blasting, Type E

Class & Division: 1.5D

ID Number: UN0332, transported as 5.1

Hydrox S

Shipping Name: Ammonium Nitrate Emulsion, intermediate for blasting explosives.

Class & Division: 5.1 UN Number: 3375

US DOT REFERENCE NUMBER

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AUSTIN POWDER

Our Mission is to improve the world we live in through the safe and responsible use of explosives.