

# **PRODUCT INFORMATION** BROCHURE

# **HYDROMITE 1**



**Hydromite 1** is a blasting agent based on an emulsion blended with ammonium nitrate; providing an excellent combination of detonation velocity and gas volume. Widely used in surface mining, quarrying and construction work. Excellent results achieved when used as a column load or as a base charge. Hydromite 1 can be initiated by a suitable sized cartridge of Emulex 1 or a booster charge (APB).

1.1D

# PRODUCT OVERVIEW

### PROPERTIES

Nominal Density [g/cm <sup>3</sup> ]	1.25
Oxygen balance [%] <sup>(1)</sup>	-1.5
Gas Volume [L/kg] <sup>(1)</sup>	1,093
Heat of explosion [kJ/kg] <sup>(1)</sup>	2,836
RWS [ANFO=100] <sup>(1)</sup>	77
RBS [ANFO=0.82 g/cm <sup>3</sup> ] <sup>(1)</sup>	104
Velocity of detonation [m/s] (confined) <sup>(2)</sup>	Min. 4,500

Notes:

 <sup>(1)</sup> Energy values are calculated using Explo 5, a thermodynamic computer code employed by Austin Powder Company. Other computer codes may give different values.
<sup>(2)</sup> VOD is an average reference value taken from detonations with APB 20.

#### **BENEFITS**

- Its high energy allows the drilling pattern to be extended for more economical blasting.
- It develops an excellent gas volume for displacement.
- Low amount of toxic fumes.
- Excellent water resistance.
- Good handling due to the rigidity of the cartridges.
- Good coupling characteristics when the diameter of the applied product is adequate to the diameter of the hole.

## **STANDARD PACKAGING**

Cartridge size [mm]	Cartridge / Box Units	Weight Neto box (±3%) [kg]	Gross box weight (±3%) [kg]
50 x 500	21	- 25.0	
60 x 500	15		26.2
70 x 500	11		20.2
80 x 500	8		

Notes: For other sizes consult the commercial department.

#### USE

- Minimum temperature limit 0 °C
- Maximum temperature limit +50 °C
- Start with Booster (minimum APB 225) or Emulex.
- Do not initiate with detonating cord or detonator.
- Not for underground use.
- Maximum static overpressure 0.3 MPa (3 bar) for 24 hours.
- Not suitable for hazardous environments where flammable gases or dusts may exist.
- Austin is not responsible for any loss or liability arising from the use of the product on soils containing pyrite or other reactive material.
- Do not open or squeeze cartridges

#### **SHELF LIFE, STORAGE & DISPOSAL**

- Shelf life is 12 (twelve) months from the date of manufacture.
- Storage:
  - Minimum temperature limit 0 °C (max. 3 months storage down to -10 °C)
  - Maximum temperature limit 30 °C (greater than 30 °C, max. 3 months)
  - This product must be stored in High Explosive magazines. These magazines must meet the conditions required by local legislation.
- Disposal: According to local regulations. If you have any questions, ask the supplier.

#### **TRANSPORT – UN CLASSIFICATION**

Shipping Name: EXPLOSIVES FOR BLASTING TYPE E Class & Division: 1.1D ID Number: UN 0241

Contact your local Austin Powder representative for further information.

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