

# Emulex 1

## PRODUCT INFORMATION BROCHURE

**Emulex 1** is a detonator sensitive emulsion with an excellent combination of velocity of detonation and good gas generation characteristics. Widely used in surface mining blasting, quarrying and construction work. Suitable for use as a column load or base charge. Emulex 1 is also suitable for tunneling applications and for use as booster charge for less sensitive explosives such as ANFO and blasting agents.

### ADVANTAGES

- High energy allows an extended drilling pattern for more economical blasting cost.
- Develops excellent gas volume for heave displacement.
- Very low amount of toxic fumes.
- Good borehole coupling characteristics when the diameter of product applied is matched to the dimensions of the blast hole.
- Excellent water resistance.
- Good handling due to stiff cartridges.

### PROPERTIES

Properties	Value
Nominal Density [g/cm <sup>3</sup> ]	1.2
Oxygen balance [%] <sup>(1)</sup>	+0.0
Gas Volume [L/kg] <sup>(1)</sup>	925
Heat of explosion [kJ/kg] <sup>(1)</sup>	3,155
Relative weight strength [ANFO=100]	80
Relative bulk strength [ANFO=0.85 g/cm <sup>3</sup> ]	115
Velocity of detonation [m/s] <sup>(2)</sup> (without confinement)	4,900 (diameter 35 mm) 5,600 (diameter 65 mm)

Notes:

<sup>(1)</sup> Theoretical values based on Austin modeling which assumes ideal detonation. Values calculated with other codes may differ.

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



**AUSTIN POWDER**  
INTERNATIONAL

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### STANDARD PACKAGING

Cartridge Size [mm]	Cartridge Weight [kg]	Box Weight NEQ [kg]
35 x 700	0.840	25.2
55 x 700	2.100	25.2
65 x 700	3.125	25.0

Notes: Size and weight are nominal values and may show production related variations. Other sizes are available on request.

### STORAGE

- Lower temperature limit 0 °C (max. 3 months of storage down to -10 °C)
- Upper temperature limit +30 °C

### USE

- Lower temperature limit -15 °C
- Upper temperature limit +60 °C
- Minimum detonator 0.7 g PETN or detonator of comparable strength
- Maximum static overpressure 0.3 MPa (3 bar) for 24 hours
- For underground use
- Not for use in hazardous environments where flammable gases or dust may exist
- Austin accepts no responsibility for any loss or liability arising from use of the product in ground containing pyritic or other reactive material

### SHELF LIFE

1 year from the date of manufacture

### DISPOSAL

In accordance with local and national legal requirements. In doubt contact your supplier or the manufacturer.

### TRANSPORTATION DATA

Shipping Name: EXPLOSIVE, TYPE E

UN Class and Division: 1.1D

UN Number: 0241

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