



# PRODUCT INFORMATION

## BROCHURE

1.1D

# Emulex 1



**Emulex 1** is a detonator-sensitive emulsion characterized by an excellent combination of detonation velocity with good gas generation properties. It is widely used in mining blasting, quarrying and construction. It is suitable as a column or bottom load. Emulex 1 is also suitable for tunnel excavation or for use as a booster for less sensitive explosives such as blasting agents (e.g., ANFO).

## PRODUCT OVERVIEW

### ADVANTAGES

- Its high energy allows the drilling pattern to be extended for more economical blasting.
- It develops 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 product is adequate to the blasthole diameter.

### APPLICATION RECOMMENDATIONS

- Lower temperature limit -10 °C.
- Highest temperature limit +60 °C.
- Minimum detonator of 0.64 g of PETN or detonator of comparable strength.
- For underground and surface use.
- It must not be used in hazardous environments where flammable gases or dust may be present.
- Austin does not accept responsibility for any loss or liability arising from the use of the product on land containing pyritic or other reactive material.

## PROPERTIES

Properties	Value
Nominal density [g/cm <sup>3</sup> ]	1.18
Oxygen Balance [%] <sup>(1)</sup>	+2.0
Gas Volume [L/kg] <sup>(1)</sup>	991
Heat of Explosion [kJ/kg] <sup>(1)</sup>	3.041
Relative Weight Strength <sup>(1)</sup>	83
Relative Bulk Strength <sup>(1)</sup>	111
Velocity of Detonation [m/s] (not confined) <sup>(2)</sup>	4,700 (diameter 32mm)
Velocity of Detonation [m/s] (not confined) <sup>(2)</sup>	5,200 (diameter 60mm)

Notes:

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

2. The velocity of detonation will depend on the conditions of application, diameter, and confinement.

## STANDARD PACKAGING

Dimensions (mm)	Cartridge Number	Cartridge Weight (Kg)	Box Weight (Kg)
25 x 400	100	0.25	25
63 x 400	15	1.65	25

Notes: Dimensions and weight are nominal values subject to variations related to production. Other dimensions available according to customer requirements.

## SHELF LIFE, STORAGE & DISPOSAL

- **SHELF LIFE:** 12 (twelve) months from the date of manufacture under proper storage conditions.
- **STORAGE:** Storage must be in accordance with local, provincial, state and federal laws. Store in a dry, fresh, clean and well-ventilated environment. Do not expose the product to direct sunlight or heat sources. Lower temperature limit +10 °C. Upper temperature limit +35 °C
- Disposal of explosive materials can be hazardous. Methods of safe disposal of explosives may vary depending on the user's situation. Please contact an Austin Powder Technical Representative for information on safe practices.

## TRANSPORT – UN CLASSIFICATION

Shipping Name: Explosive, Type E

Class & Division: 1.1D

ID Number: UN 0241

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**Our Mission: To improve the world we live in through the safe and responsible use of explosives.**

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