

# EMULEX® 1000UG

## PRODUCT INFORMATION BROCHURE

EMULEX® 1000UG is a 100% emulsion explosive, heavy-grease-like viscosity and water resistance designed for tunnelling or underground blasting application. It has a yellowish golden appearance. Due to its viscosity, it can be charged into vertical or horizontal boreholes as it sticks to the holes firmly. AN blend is not included as this helps to reduce its detonation strength and in turn keeping the wall/underground stables.

The product is chemically sensitised to a density in range of 0.90 – 1.25 g/cc allowing flexibility to meet blast requirements. After sensitisation, the product will be booster sensitive and is used as the main charge in underground blasting application. It works remarkably well for wet, and wet/dry blast-holes in tunnelling and underground project with its excellent water resistance. The bulk emulsion is manufactured and delivered into the boreholes using a special TK underground pumping unit.

### Hazardous Shipping Description

Ammonium Nitrate Emulsion, intermediate for blasting explosives  
Class 5.1, UN3375, PG II  
Note: Non-sensitised Emulsion



### Priming

Sensitized EMULEX® 1000UG emulsion can be effectively primed with EMULEX series packaged products or pentolite booster. The booster diameter and total number of boosters will vary with the rock formation and size of boreholes.

### Shelf Life

EMULEX® 1000UG emulsion has a shelf life of six (6) months from the date of manufacture, when transported and stored under ideal conditions.

### Temperature Requirement

Recommended use/ store in temperature ranging from 0 to 50°C.

### Reactive Ground Conditions

EMULEX® 1000UG is not designed for use in reactive ground conditions.



**AUSTIN POWDER**

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### Technical Properties ( Emulex®1000UG gassed emulsion )

|  |               |
|--|---------------|
| Bulk Blend Density (g/cc)              | 0.90 - 1.05   |
| Minimum diameter (mm)                  | 40            |
| Water Resistance                       | Excellent     |
| Velocity of Detonation (m/s, approx.)* | 4,000 - 5,000 |
| Sleep Test                             | Min 7 Days    |
| Energy (MJ/kg)**                       | 3.00          |
| Relative volume strength (ANFO = 100)  | 108           |

\* VOD is dependent on product density, diameter and other factors.

\*\* Energy value is calculated using a computer program based on thermodynamic properties.

### Sensitising System

|                        |                                    |
|------------------------|------------------------------------|
| Acid Solution          | Diluted solution of citric acid    |
| Gassing Agent Solution | Diluted solution of sodium nitrite |

Gassed density 0.90 – 1.25 g/cc within 30min

### Application Recommendations

- Do secure the signal tube during loading.

Contact your local Austin Powder representative for further information.

#### Disclaimer of Warranties and Limitations of Liabilities

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12/2019

