

TITAN[®] SME[™] (SITE MIXED EMULSION)

Gassed Bulk Emulsion



Product Description

TITAN SME (SITE MIXED EMULSION) is a gassed, bulk emulsion made on the bench and designed for quarry and open pit mining operations. Transported as an oxidizer, TITAN SME is formulated to be sensitized during the borehole loading process using Dyno Nobel's innovative chemical gassing and emulsion technology. The process used to manufacture TITAN SME enhances water resistance and detonation performance while improving loading characteristics. Chemical gassing allows the average density of TITAN SME to be varied as required for geological conditions to optimize its explosive performance to achieve best blast results.

Application Recommendations

- The minimum cast booster weight recommended to prime TITAN SME explosive is a 340 g (12 oz) cast booster.
- TITAN SME can be used in boreholes up to 36 m (120 ft) deep.
- **ALWAYS** double prime when bulk explosive columns exceed 6 m (20 ft). One primer should be positioned near the bottom of the hole and the second near the collar.
- **ALWAYS** ensure primers are securely positioned in the explosive column.
- Do not use detonating cord downlines with TITAN SME without first consulting your Dyno Nobel representative.

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Technical
Information



Properties

SDS
#1052

Density (g/cc) Avg	1.20
The average loading density can be varied, depending on blast hole depth and diameter, from about 1.00 to 1.25 g/cc to best match rock type and application requirements. Minimum recommended cup density is 0.95 g/cc.	
Energy^a (cal/g)	680
(cal/cc)	815
Relative Weight Strength^{a,b}	0.77
Relative Bulk Strength^{a,b}	1.13
Velocity^c (m/sec)	5,200
(ft/sec)	17,100
Detonation Pressure^c (Kbars)	81
Gas Volume^a (moles/kg)	45.0
Water Resistance	Excellent
Minimum Diameter	
(mm)	65
(inches)	2.5
Loading Method	Pumped
^a All Dyno Nobel Inc. energy and gas volume values are calculated using PRODET [™] , a computer code developed by Dyno Nobel Inc. for its exclusive use. Other computer codes may give different values.	
^b ANFO = 1.00 @ 0.82 g/cc	
^c Confined in 150 mm (6 in) diameter at average density.	
Transportation, Storage and Handling	Transport, store, handle and use SME ingredients in compliance with federal, state, provincial and local laws governing bulk hazardous materials.
Hazardous Shipping Description	Oxidizing Liquid, n.o.s. (Ammonium Nitrate)
	5.1 UN 3139 II



Dyno Nobel Inc.

2795 East Cottonwood Parkway, Suite 500, Salt Lake City, Utah 84121 USA
Phone 800-732-7534 Fax 801-328-6452 Web www.dynonobel.com

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