

# TECHNICAL DATA SHEET



## TITAN® SME™ (Site Mixed Emulsion)

### Gassed Bulk Emulsion

#### Properties

SDS  
#1052

<b>Density</b> (g/cc) avg	1.20
The average loading density can be varied, depending on borehole depth, from about 1.00 to 1.25 g/cc to best match rock type and application requirements.	
<b>Energy<sup>a</sup></b> (cal/g)	680
(cal/cc)	815
<b>Relative Weight Strength<sup>a,b</sup></b>	0.77
<b>Relative Bulk Strength<sup>a,b</sup></b>	1.13
<b>Velocity<sup>c</sup></b> (m/sec)	5,200
(ft/sec)	17,100
<b>Detonation Pressure<sup>c</sup></b> (Kbars)	81
<b>Gas Volume<sup>a</sup></b> (moles/kg)	45.0
<b>Water Resistance</b>	Excellent
<b>Minimum Diameter</b> (mm)	65
(inches)	2.5
<b>Loading Method</b>	Pumped

<sup>a</sup> 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.

<sup>b</sup> ANFO = 1.00 @ 0.82 g/cc

<sup>c</sup> 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



#### 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.

**ADDITIONAL INFORMATION** – Visit [dynonobel.com](http://dynonobel.com) for Brochures and Case Studies related to this product.

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