



### Product Description:

The Blasting Services **ThrowMAX®** Heavy ANFO range of products are a blend of Blasting Services' **HEAT® emulsion**, Ammonium Nitrate and Fuel Oil for use in dry and dewatered blastholes. These products are augured into the blasthole. The benefits of the **ThrowMAX®** range of products are:

- Safe and efficient explosive.
- High blasthole loading rates.
- High energy products that can easily be adapted to meet the energy requirements for any non-reactive rock type in dry or dewatered blastholes.
- **ThrowMAX®** Heavy ANFO products have a range of densities and are water resistant.
- **ThrowMAX®** 830 and 840 products can be used in dewatered blast holes with static water conditions.

### Application:

**ThrowMAX®** Heavy ANFO products are high energy products ideal for dry or dewatered holes in non-reactive rock types with no water present or static water conditions.

### Specification: (Stated at 100MPa)

Properties:	ANFO	<b>ThrowMAX®</b>			
Product Identification		TM 810	TM 820	TM 830	TM 840
Energy <sup>1</sup> (MJ/kg)	3.77	3.69	3.62	3.55	3.48
Relative Weight Strength <sup>1</sup>	100	98	96	94	92
Relative Bulk Strength <sup>1</sup>	100	117	126	135	144
Density Range <sup>2</sup>	0.7 – 0.85	0.90 - 1.00	1.00 – 1.10	1.10 – 1.20	1.20 – 1.30
Minimum Hole Diameter (mm)	60	102	115	140	152
Water Resistance <sup>3</sup>	0	0	1	2	3
Down Hole life in dry conditions <sup>4</sup>	4 weeks	4 weeks	4 weeks	4 weeks	4 weeks

1. Blasting Services energy values, Relative Weight Strength and Relative Bulk Strength are calculated using an in-house thermodynamic code. This traditional way of calculating energy is directly related to density and does not take into account the distribution of energy.

2. A number of factors affect final product density including in-hole conditions, ammonium nitrate density, emulsion density, ammonium nitrate fines, bulking agent density etc.
3. Water resistance is a qualitative measure with 0 being none to 3 being good and 5 being excellent.
4. Sleep times are dependent on in-hole water conditions. In general the longer a particular product sleeps the poorer the blasting outcomes. De-watered holes should be loaded and shot immediately, while in dry non reactive rock types the sleep time should never exceed 4 weeks assuming no rainfall events.

**Classification:**      **NSW**

**QLD**

**UN No.:**                **0082**

**0241**

**Shipping Name:**      **EXPLOSIVE, BLASTING, TYPE B**  
**Class:**                    **1.1D**

**EXPLOSIVE, BLASTING, TYPE E**  
**1.1D**

**Material Safety Data Sheet (MSDS):**    **DM-BL-MSDS 3 ThrowMAX®**

## **Recommendations for Use:**

### **Priming Requirements:**

The minimum primer is a 340g cast Booster although a 400g cast Booster is preferred. It is recommended that an additional cast booster be used every 15 metres of column charge to reduce risks associated with explosive column disruption.

### **Packaging:**

**ThrowMAX®** is available in bulk, delivered through bulk truck delivery systems.

### **Handling:**

Information regarding this product is available from the relevant Blasting Services MSDS.

### **Transportation:**

All explosives are classified as Dangerous Goods and must be transported in accordance with relevant State and Commonwealth regulations.

### **Storage and Security:**

All explosives are classified as Dangerous Goods and must be stored and secured in accordance with relevant State and Commonwealth regulations.

### **Manufacturer:**

#### **Blasting Services Pty Limited**

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### **Warning and Disclaimer:**

To the best of Blasting Services's knowledge the information contained in this data sheet is accurate at the time of issue. The conditions under which this information is used is outside the control of Blasting Services and each user should review and is responsible for being aware of the product applications in the specific context of the intended use.

Blasting Services is not responsible for damages of any nature resulting from the use of or reliance upon the information in this data sheet. To the extent to which Blasting Services is able, all conditions, representations and warranties, whether express or implied, not required to be binding by statute are excluded.