

ThrowMAX® 1600

Product description

Downer Blasting Services' (DBS) *ThrowMAX® 1600* Heavy ANFO range of products are blends of *HEAT® 1600* Emulsion, Ammonium Nitrate and Fuel Oil for use in dry and dewatered blastholes.

These products are augured into the blast holes.

The benefits of the *ThrowMAX® 1600* range include:

- Safe and efficient explosives
- High blasthole loading rates
- High energy products that can easily be adapted to meet the energy requirements for any non-reactive rock type
- Available in a range of in-hole densities.

Application

ThrowMAX® 1600 heavy ANFO products are high-energy bulk explosives ideal for dry or dewatered blast holes.

- *ThrowMAX® 1610*, *1620* and *1630* products should be used in dry blast holes only
- *ThrowMAX® 1640* can be used in both dry and dewatered blast holes without water recharge
- *ThrowMAX® 1640* should not be used in areas where dynamic water is present
- *ThrowMAX® 1600* products should not be loaded into areas with reactive and /or hot ground conditions
- Consult your technical representative for site-specific applications

Specifications (stated at 100MPa)

Properties	ANFO	ThrowMAX®			
		TM 1610	TM 1620	TM 1630	TM 1640
Product identification					
Effective energy ¹ (MJ/kg)	2.3	2.6	2.7	2.8	2.9
Relative weight strength ¹ (%)	100	113	117	122	124
Relative bulk strength ¹ (%)	100	133	154	178	201
Velocity of detonation (VoD) range ² (km/s)	3.0-4.5	4.0-4.6	4.0-4.6	4.0-4.7	4.0-5.2
Nominal density range ³ (g/cm ³)	0.7-0.85	0.85-0.94	0.95-1.05	1.06-1.16	1.17-1.30
Minimum hole diameter (mm)	60	100	115	140	152
Maximum down hole life in dry conditions	4 weeks	4 weeks	4 weeks	4 weeks	4 weeks

1. Downer Blasting Services' energy values, relative weight strength and relative bulk strength are calculated by an ideal detonation modeling computer program at the Imperial College London, United Kingdom.
2. Range of VoD measured in –situ in medium hard rock and hole diameters between 102 and 270 mm.
3. A number of factors affect final product density including in-hole conditions, ammonium nitrate density, emulsion density, etc.

ThrowMAX[®] 1600

Classification

UN No.	0082
Shipping name	EXPLOSIVE, BLASTING, TYPE B
Class	1.1D
Safety Data Sheet	ThrowMAX

Recommendations for use

Priming Requirements: The preferred primer is a 400g cast booster. It is recommended that an additional cast booster be used every 12 metres of column charge to reduce risks associated with explosive column disruption.

Packaging: ThrowMAX[®] 1600 is available in bulk and is delivered through bulk truck delivery systems.

Handling: Information regarding this product is available from the relevant SDS.

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

Downer EDI Mining – Blasting Services Pty Ltd

ABN: 97 009 687 487

A: 22 Cordelia Street
South Brisbane

P: + 61 7 3026 6666

F: + 61 7 3026 6070

1800 680 402 (Emergency contact- Australia)

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