

AquaMAX[®] 1600

Product description

Downer Blasting Services' (DBS) AquaMAX[®] 1600 range of products is a blend of HEAT[®] 1600 Emulsion, Ammonium Nitrate and Fuel Oil for use in wet blastholes as well as hard rock blasting applications.

These products are pumped into the blast holes to displace water.

The benefits of the AquaMAX[®] 1600 range include:

- Excellent safety characteristics
- Excellent water resistance, which enables extended sleep time in wet holes
- Ability to chemically gas to various in-hole densities to meet specific blast requirements as well as ground conditions
- High-shock energy, which leads to excellent fragmentation in hard ground conditions
- Ability to tailor product type on-bench to suit the ground conditions and blast requirements

Application

AquaMAX[®] 1600 products are high-energy bulk explosives ideal for wet blast holes.

- AquaMAX[®] 1600 products can be used in wet blastholes containing static water; ideally these holes should be fired within 14 days of loading
- Blastholes with dynamic water should be loaded and fired as soon as possible, however extra precautions may be required
- Blastholes should only be stemmed after completion of the gassing reaction
- AquaMAX[®] 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	AquaMAX [®]		
Product identification		AM 1660	AM 1670	AM 1680
Effective energy ¹ (MJ/kg)	2.3	2.7	2.6	2.5
Relative weight strength ¹ (%)	100	115	112	109
Relative bulk strength ¹ (%)	100	180	175	170
Velocity of detonation (VoD) range ² (km/s)	3.0-4.5	4.2-5.7	4.2-5.6	4.2-5.5
Nominal density range ³ (g/cm ³)	0.7-0.85	1.05-1.25	1.05-1.25	1.05-1.25
Minimum hole diameter (mm)	60	100	100	100
Maximum down hole life in dry conditions	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 and the amount of gassing etc. The AquaMAX[®] range of products is able to be gassed to a cup density ranging from 0.95 to 1.25g/cm³.

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Classification

UN No.	0241
Shipping name	EXPLOSIVE, BLASTING, TYPE E
Class	1.1D
Safety Data Sheet	AquaMAX

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: AquaMAX[®] 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

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