TECHNICAL DATA SHEET AquaMAX[®]1200

Product Description

Downer Blasting Services' (DBS) AquaMAX[®] 1200 bulk explosive range consist of a blend of HEAT[®]1200 Inhibiting Emulsion, Ammonium Nitrate and Fuel Oil for use in both reactive and non-reactive ground types.

These products are delivered into the blast holes to displace water. The benefits of the AquaMAX[®]1200 range include:

- Excellent inhibiting characteristics suitable for varying levels of ground reactivity;
- 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, and;
- Ability to tailor product type on-bench to suit the ground conditions and blast requirements.

Application

AquaMAX[®]1200 products are high-energy bulk explosives formulated for use in reactive ground applications.

AquaMAX[®]1200 products are not suitable for hot ground applications.

- AquaMAX[®]1200 products can be used in wet blast holes containing static water – ideally these holes should be fired within 14 days of loading.
- Blast holes with dynamic water should be loaded and fired as soon as possible, however extra precautions may be required.
- When used in reactive ground conditions sleep times will be determined through testing.
- Blast holes should only be stemmed after completion of the gassing reaction.
- Please consult your technical representative for site-specific applications.

Properties	ANFO	AquaMAX [®]		
		AM 1260	AM 1270	AM 1280
Energy ¹ (MJ/kg)	2.3	2.5	2.4	2.4
Relative weight strength ¹ (%)	100	110	106	102
Relative bulk strength ¹ (%)	100	172	166	160
Velocity of Detonation (VoD) Range ² (km/s)	3.0 – 4.5	4.2 – 5.7	4.2 – 5.8	4.2 – 5.5
Nominal density range ³ (g/cm ³)	0.7 – 0.85	0.95 – 1.25		
Minimum hole diameter (mm)	60	100		
Hole Condition	Dry	Dry, Dewatered, Wet		
Delivery Method	Auger	Pump		
Sleep Time in dry conditions ⁴	4 weeks			

Technical Properties

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DBS



Recommendations for use

<u>Priming Requirements:</u> 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.

<u>Packaging:</u> AquaMAX[®]1200 is available in bulk and is delivered through bulk truck delivery systems.

<u>Handling</u>: Information regarding this product is available from the relevant SDS.

<u>Transportation</u>: All explosives are classified as Dangerous Goods and must be transported in accordance with relevant State and Commonwealth regulations.

Manufacturer

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Note

All Specification are stated at 100MPa

- 1. Downer Blasting Services' energy values, relative weight strength and relative bulk strength are calculated by an ideal detonation modelling 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 the nominal density including, ammonium nitrate density, HEAT emulsion density and the amount of gassing.
- 4. In reactive ground applications, the maximum sleep times will be determined by laboratory testing based on the AEISG Code of Practice for "Elevated Temperature and Reactive Ground".

DISCLAIMER: All information contained in this data sheet is accurate, complete and up-to-date at the time of issue. Whilst Downer EDI Mining - Blasting Services Pty Ltd ("DBS") has made every reasonable effort to ensure the accuracy of the information; every user is responsible for its own understanding and the safe and correct use of the products. It is the sole responsibility of the user to make enquiries, obtain advice and determine the necessary safe conditions for the product's intended use and the user assumes liability for any loss, damage, expense or cost resulting from such use. To the extent permitted by law, DBS expressly disclaims any and all liability arising from the use, or reliance upon the information contained in this data sheet.

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<u>Storage and Security:</u> All explosives are classified as Dangerous Goods and must be stored and secured in accordance with relevant State and Commonwealth regulations.

Classification

UN No.	0241
Shipping Name	Explosive Blasting, Type E
Class	1.1D
Safety Data Sheet	AquaMAX

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