

## TECHNICAL DATA SHEET

# AquaMAX®1700

### Product Description

Downer Blasting Services' (DBS) AquaMAX® 1700 High Energy bulk explosives consist of blends of HEAT®1700 Emulsion, Ammonium Nitrate and Fuel Oil for use in wet blast holes where higher energy blasting is required.

These products are delivered into the blast holes to displace water. The benefits of the AquaMAX®1700 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, and;
- Ability to tailor product type on-bench to suit the ground conditions and blast requirements.

### Application

AquaMAX®1700 products are high-energy bulk explosives ideal for wet blast holes.

- AquaMAX®1700 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.
- Blast holes should only be stemmed after completion of the gassing reaction.
- AquaMAX®1700 products should not be loaded into areas with reactive and/or hot ground conditions.
- Please consult your technical representative for site-specific applications.

### Technical Properties

Properties	ANFO	AquaMAX®			
		AM 1760	AM 1770	AM 1780	AM 1790
Energy <sup>1</sup> (MJ/kg)	2.3	2.6	2.6	2.5	2.4
Relative weight strength <sup>1</sup> (%)	100	114	112	108	105
Relative bulk strength <sup>1</sup> (%)	100	179	175	169	164
Velocity of Detonation (VoD) Range <sup>2</sup> (km/s)	3.0 – 4.5	4.2 – 5.7	4.2 – 5.8	4.2 – 5.5	4.2 – 5.0
Nominal density range <sup>3</sup> (g/cm³)	0.7 – 0.85	0.90 – 1.25			
Minimum hole diameter (mm)	60	75			
Hole Condition	Dry	Dry, Dewatered, Wet			
Delivery Method	Auger	Pump			
Sleep Time in dry conditions	4 weeks				

## TECHNICAL DATA SHEET

# AquaMAX®1700

### 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®1700 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.

### Classification

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

### Manufacturer

**Downer EDI Mining – Blasting Services Pty Ltd**

**ABN:** 97 009 687 487

**A:** Level11, 135 Coronation Drive  
Milton QLD, 4064

**P:** + 61 7 3564 5000

### Emergency Contact

Australia: 1800 680 402

### 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.

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.

© Downer EDI Mining – Blasting Services Pty Ltd. This work is copyright. Other than as permitted by law, no part of it may be reproduced, stored in a retrieval system or transmitted in any form or by any process without prior written permission.