

RIOFLEX MX 9000

Bulk Watergel Explosive

www.maxam.-corp.com.au

RIOFLEX MECHANICAL

DESCRIPTION

RIOFLEX MX 9000 is a mechanically sensitised high energy bulk explosive suitable for most mine and quarry applications.

RIOFLEX MX 9000 is a higher energy product compared to emulsion based products due to its lower water content.

RIOFLEX MX 9000 maximises energy yields, making the product an ideal solution for optimising rock fragmentation diggability.

RIOFLEX MX 9000 is highly water resistant due to the RIOFLEX matrix content.

Advantages

- Larger density range provides flexibility compared to emulsions
- High energy due to low water content
- Crosslinked to provide a highly water resistant product
- Can be pumped up to 250kg/min
- Can minimise blast fumes
- Inhibiting qualities allowing for use in reactive ground (after testing)



1. Crosslinking process which gels and increases water resistance.



2. Critical diameter of 76 mm.

APPLICATIONS

RIOFLEX MX 9000 is produced from the MSU at a wide range of average in-hole densities, from 0.85 to 1.32 g/cm³ depending on the application required, ground conditions and blasthole depth. The energy availability and variable density profile means that fragmentation can be enhanced as well as optimising of blast design. Expanding drill patterns in comparison to emulsion designs is an option.

RIOFLEX MX 9000 is suitable for use in wet blastholes due to its superior formulation and crosslinking. The product must be loaded from the base of the blasthole to displace the water and to maintain the required density.

RIOFLEX MX 9000 can be pumped at delivery rates up to 250kg/min into the base of wet blastholes.

RIOFLEX MX 9000 can be used in blastholes up to 30m, depending on density of the product, with greater depths possible in certain scenarios upon consultation with MAXAM.

RIOFLEX MX 9000 has inhibiting qualities due to its standard formulation.

MAXAM

Technical Characteristics (Nominal Values)

Average In-hole Density** (g/cm ³)	0.85 - 1.32
Velocity of Detonation* (m/s)	3200 - 6500
RELATIVE EFFECTIVE ENERGY¹ (%)	
Relative Weight Strength	99 - 125
Relative Bulk Strength	105 - 205
Gas Volume (L/kg)	1018

1) ANFO: Density 0,80 g/cm³, effective energy 2260 kJ/kg

* VOD is dependent on application, diameter, confinement and density. The maximum value within the range is the ideal VOD.

** ANFO doping prill density or truck configuration may not allow for the density range specified. Please contact MAXAM prior to commitment to a specific density range.

NOTE: The average density in the borehole is dependent on hole length.

SAFETY

- Incorrect application may result in generation of post blast fume.
- RIOFLEX MX 9000 is suitable for use in ground temperatures of 0°C to 55°C.
- RIOFLEX MX 9000 has inhibiting qualities due to its standard formulation. All reactive ground applications must be tested prior to its use to ensure reactions can be controlled.

TYPE	ANFO%	Average In-hole Density** g/cm ³	Water Resistance	Use in Wet Borehole	Delivery Method
RIOFLEX MX 9000	10	0.85 - 1.32	Excellent	Recommended	Pump

RECOMMENDATIONS FOR USE

RIOFLEX MX 9000 critical diameter is dependent on its density, for lower densities the critical diameter is 76mm.

PRIMER REQUIREMENTS - RIOFLEX MX 9000 is formulated to be booster sensitive and requires a minimum of a RIOBOOSTER 400g primer. Smaller primers may reduce the performance of the explosives and are not recommended with this product. It is recommended to use additional RIOBOOSTERS where there is a risk of column disruption and/or explosive column length exceeds 12m. RIOCORD detonating cord down lines are not recommended for use with this product range.

WATER RESISTANCE - Suitable for pumping into wet holes or auguring into dewatered blastholes with static water.

SLEEP TIME - Up to 14 days in static water dependent on ground conditions. Consult with MAXAM if the product is slept over 7 days to ensure optimal performance.

STORAGE AND TRANSPORT

RIOFLEX is transported as a non sensitized matrix suspension, classified as an oxidizer 5.1 and should be stored in tanks and silos in accordance with all local regulations for the storage of oxidizer materials.

Product Classification	RIOFLEX
Class	1.1D
UN Number	0241

MAXAM Australia Pty Ltd
P.O. Box 948
Sumner Park
QLD 4074
Ph: 07 3717 1818

SAFETY WARNING

Read the Material Safety Data Sheet provided carefully before using RIOFLEX. MAXAM strongly recommends not to use RIOFLEX products with detonators and/or initiation systems supplied by other manufacturers in the same blast and declines all liability in these cases. RIOFLEX must be stored at moderate temperatures in a dry and well ventilated place.

DISCLAIMER AND LIMITATION OF LIABILITY

The information contained herein (the "Information") is not exhaustive and is subject to periodical review. The data contained herein may vary on account of the particular operating and maintenance conditions and of external factors, such as humidity, temperature and pressure. MAXAM Australia P/L and/or its affiliates ("MAXAM") do not warrant or make any representation regarding the accuracy or completeness of the Information. MAXAM further reserves the right, in its sole discretion and without prior written notice, to modify the products described herein (the "Products") and/or their specifications.

The use of the Products is an intrinsically dangerous activity and must, consequently, be restricted to qualified and trained users in possession of any necessary permits and licenses, and comply at all times with appropriate safety and risk prevention measures and with the applicable law. The use, storage, or otherwise handling of the Products may be subject to local regulations and restrictions, which must be examined and observed by the user. This document and any accompanying information (the "Documentation") is not intended to constitute, and shall not be construed as, an offer or contractual commitment on MAXAM's side. MAXAM expressly disclaims any liability towards third parties with regard to the Documentation. For further information about the Products, please contact your distributor or sales representative directly.