

RIOFLEX



1. Cross-linking process which gels and increases water resistance.



2. RIOFLEX RAPID underground application.

ADVANTAGES

- High energy bulk explosive for all metalliferous mining applications
- Fully water resistant
- Wider range of densities enabling high and low energy products from a single pumping unit
- Ultra-low density capabilities make it ideal for perimeter control and smooth wall blasting practices
- Clean burning, Low Fume enabling rapid post-blast re-entry
- Non-explosive base which can be stored on-site as an oxidiser

DESCRIPTION

RIOFLEX RAPID is a highly energetic underground bulk watergel explosive, consisting of a base Oxidant Matrix, sensitizer and a cross linker, for use in the most dynamic and aggressive environments.

RIOFLEX RAPID is a robust and versatile product formulated from highly refined fuels with a lower water content than conventional emulsions delivering a greater range of available energy.

RIOFLEX RAPID is delivered to the blast hole through twin delivery lines where the upper and lower density ranges have been colour coded for ease of identification in development, production and contour blasting applications.

APPLICATION

RIOFLEX RAPID is a fit for purpose explosive for use in all production, development and civil underground mining environments. RIOFLEX RAPID has been designed to be inherently stable with an adjustable density range of 0.4 - 1.25 g/cm³. The ultra-low density capability of RIOFLEX RAPID makes this product ideally suited for use in smooth wall and contour blasting methods.

RIOFLEX RAPID is suitable for use in wet or dry mining conditions and has supreme water resistance properties. The cross linker incorporated into the formulation makes RIOFLEX RAPID highly resistant to dynamic water inflows.

RIOFLEX RAPID's balanced oxygen and the cross-linking properties ensures minimal fume generation dramatically reducing cycle times and enabling rapid post blast re-entry.

RIOFLEX RAPID exceeds underground mining and civil requirements by delivering excellence in blasting applications.

SAFETY

Incorrect application of RIOFLEX RAPID may result in high levels of undesirable pre and or post blast fumes. Always adhere to good loading practices.

Suitable for use in ground temperatures between 0 C – 55 C

RIOFLEX RAPID is an inhibited product however if applied to any known or potentially reactive ground, a testing program must be undertaken before use to ensure the inhibiting action of the product is sufficient for the intended application, otherwise MAXAM accepts no responsibility for any loss or liability arising from the use of RIOFLEX RAPID in reactive material.

RIOFLEX RAPID

Technical Characteristics (Nominal Value)

	Development	Contour
Average Density (g/cm ³)	0.8 - 1.25	0.4 - 0.80
Velocity of Detonation* (m/s)	3000 - 6900	1800 - 4800
Relative Effective Energy ¹ (%)		
Relative Weight Strength	93 - 118	60 - 94
Relative Bulk Strength	93 - 184	30 - 94
Gas Volume (l/kg)	1020	1020

1) ANFO: Density 0.80g/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.

Product

RIOFLEX RAPID

Water Resistance

Excellent

Application

Development & Production

Delivery

MAXAM Underground MSU or Mini Cassette

RECOMMENDATIONS FOR USE

RIOFLEX RAPID can be delivered by MAXAM bulk services or a customer operated MAXAM mini development cassette.

RIOFLEX RAPID is generally delivered within a density range 0.4g/cm³ to 1.25g/cm³. Consult your MAXAM representative for specialist advice if densities outside of this range are required.

RIOFLEX RAPID must be primed with a minimum of a 15g Cast Booster or 25mm x 200mm RIOHIT packaged explosives. Larger boosters must be used for larger diameter blastholes.

STORAGE AND TRANSPORT

RIOFLEX RAPID matrix is transported as a non-sensitised matrix suspension, classified as an oxidiser Comparability Class 5.1 and should be stored in approved tanks and silos in accordance with all local regulations for the storage of oxidiser materials.

Product Classification

RIOFLEX RAPID

Class

1.1D

UN Number

0241

Contact your local MAXAM representative for further information

SAFETY WARNING

RIOFLEX RAPID has a recommended sleep time of three (3) weeks in static ground water. Contact your MAXAM representative before sleeping RIOFLEX RAPID for lengths off time in excess of seven (7) days to ensure optimal performance.

RIOFLEX RAPID is cast booster and packaged explosives sensitive.

RIOFLEX RAPID can be used in temperatures between -0 C to 55 C.

Read this Technical Data Sheet and the Safety Data Sheet carefully before using RIOFLEX series products.

RIOFLEX RAPID must not be used in flammable environments such as methane and coal dust.

MAXAM strongly recommends to NOT use RIOFLEX products with initiation systems supplied by other manufacturers in the same blast and declines all responsibility in these cases.

LEGAL WARNING AND EXCLUSION OF RESPONSIBILITY

The information included in this document is subject to variations depending on the usage of the products as well as external factors such as temperature, humidity and pressure. The products described in this document are potentially dangerous and must be used and handled by competent staff only, following the applicable regulations. This document does not constitute contractual content and cannot be considered a contract. According to this document, MAXAM does not assume any obligation, responsibility or guarantee with third parties. The information contained in this sheet is valid as at 11th January 2017. To ensure the user has all the latest information about the use and handling of this product please visit www.maxamaustralia.net and or check with your local MAXAM representative.

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