

LOCKWELL FR Bulk Filler

Rapid Foaming Flame Resistant Economical Cavity Filling Foam System

Product Description

Lockwell FR Bulk Filler is an economical (low density) fire rated cavity filling foam based on polyurea silicate chemistry. Its rapid foaming and flame resistance characteristics make this an ideal product to fill voids in coal seams and fractured strata.

Lockwell FR Bulk Filler can be used in wet environments where it shows good adhesion to wet surfaces and will not absorb water.

In addition to being non-combustible due to its unique silicate chemistry, the maximum exotherm reached during cross linking is well under the maximum 150°C allowed as specified by the NSW Government Trade and Investment Mine Safety Guideline MDG 3608 August 2012, Appendix D1-TM003.

Features and Benefits

- Rapid foaming
- Flame resistant
- Ideal for filling voids in coal seams, and fractured strata
- Reasonable exothermic behavior, suitable for use in coal mines
- Can be used in wet environments
- Good adhesion to wet surfaces, no water absorption.
- Utilizes Montreal Protocol compliant foaming agents

Application Area

- Filling and stabilizing cavities in coal seams
- Filling and stabilizing cavities in fractured rock
- Consolidating other substrates such as sand and gravel

Technical and Processing Data

Mix Ratio	1A : 1B parts by volume
Onset of foaming	20 seconds
Foaming stops after	50 seconds
Foam expansion factor	Dependent on amount of water encountered (25 times)
Foam density	45 kg/m ³
Foam stability	No Shrinkage

Please note that the above figures are those measured in a controlled laboratory environment. Conditions on sites may influence these results however with correct handling and use, this would be minimal.

Product Data

	Lockwell FR Bulk Filler Part A	Lockwell FR Bulk Filler Part B
Appearance	Opaque liquid	Brown liquid
Viscosity (20°C)	400 cps	200 cps
Density (20°C)	1.4 g/ml	1.24 g/ml
Flash point	Not Applicable	> 200°C

Lockwell FR Bulk Filler is a two component system, with both components mixed in equal volume proportions (1:1 by volume) using a two-component injection pump coupled with a static in-line mixer head.

Cleaning of Injection Equipment

For short breaks, pump only Part A through the mixer.

For long breaks (e.g. storage, or after works complete) pump clean water through Part A pump / injection lines and pump clean engine oil through Part B pump / injection lines.

Storage

12 months if stored in dry, unopened containers within temperature range +5° to +35°C. Beware of frost sensitivity for Part A.

Safety Precautions

Please refer to the Material Safety Data Sheets for full details. Although Lockwell FR Bulk Filler contains isocyanates, the cured foam is inert. Nevertheless, it is recommended that only experienced operators mix and spray this product.

Wear appropriate PPE and avoid contact with skin and eyes. Mop up any spills with absorbent materials such as zeolite or sand, and dispose of in accordance with local regulations. Prevent unreacted product from entering drains.

Additional Information – Disclaimer

The information provided herein, especially recommendations for the usage and the application of our products, is based upon our knowledge and experience. Due to different materials used as well as to varying working conditions beyond our control we strictly recommend to carry out intensive trials to test the suitability of our products with regard to the required processes and applications. We do not accept any liability with regard to the above information or with regard to any verbal recommendation, except for cases where we are liable of gross negligence or false intention.