



Rapid Foaming Low Density Cavity Filling Foam

Product Description

ShieldMining™ CF Foam is an economical (low density) 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. The maximum exotherm reached during foaming is only 90°C, well under the accepted level for use in coal mines.

ShieldMining™ CF Foam can be used in wet environments where it shows good adhesion to wet surfaces and will not absorb water.

ShieldMining™ CF Foam 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.

Uses

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

Product Data

	CF FOAM PART A	CF FOAM 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

Technical Data

Onset of foaming	~ 20 seconds
Foaming stops after	~ 45 seconds
Foam Expansion Factor	~ 25 times
Foam Density	~ 45 kg/m ³
Foam Stability	No Shrinkage

Please note that the above figures are those measured in the ShieldCrete® International laboratory. Conditions in the mine may influence these results.

Cleaning Injection Equipment

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

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

Safety Precautions

Please refer to the Material Safety Data Sheets for full details. Although ShieldMining™ CF Foam contains isocyanates, the cured product is inert.

Nevertheless, only experienced operators should mix and install 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.

Storage

12 months if stored in dry, unopened containers within temperature range +5° to +35°C.

Beware of frost sensitivity for Part A.

Technical Support

For technical support, please you may send an email to mail@shieldcreteinternational.com.

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