

# Technical Data Sheet



## Minova CarboTech GmbH

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## Mining

## GEOFOAM

Approval of the District Government of Arnsberg 62.12.22.67-7-4

### Uses:

**Rapidly reacting, strongly expanding injection resin with flame protection, CFC-free.**

Applicable at ambient temperatures between 5 °C and 40 °C

### Technical Data:

The above data are laboratory data. They may vary in practice due to thermal exchange between resin and strata, pressure, and other factors.

#### **Reaction Data:**

Initial temperature	25 °C	Test procedure
Start of foaming	20 s ± 10 s	MCT PV 10-303
End of foaming	45 s ± 15 s	MCT PV 10-303
Foaming factor	15 - 30	MCT PV 10-303

#### **Material Data:**

		Component A	Component B	Norm
Density at 25 °C	kg/m <sup>3</sup>	1455 ± 30	1220 ± 15	DIN 12791
Colour	-	brownish-turbid	brown	
Viscosity at 25 °C	mPa*s	260 ± 80	140 ± 15	ISO 3219
Flash point	°C	n. a.	> 200	DIN 53213

### Composition and Properties:

GEOFOAM, Component A is a modified water glass, and component B is a modified isocyanate. After mixing the resin starts foaming-up within a few seconds to form lightweight foam. GEOFOAM is flame-resistant.

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## **Processing:**

Before pumping stir both components thoroughly.

The components are pumped by a dual component pump at the volumetric ratio 1 : 1; they are mixed thoroughly in a static mixer unit, prior to injection into strata via a packer installed in a previously drilled borehole. One minute after mixing the resins begin to foam and is forced by the foaming pressure into the rock thus is capable of caulking not only fissures but even larger cleats or coarse-particle loose formations, such as gravel.

Before a change of injection material, consult the brochure "Operating instructions and safety references on proper use of Minova CarboTech GmbH injection resins in mining".

The regulations and references from the Approval of the District government Arnsberg are to be considered.

## **Risk and safety phrases for handling GEOFOAM:**

Observe the usual precautionary measures for the handling of chemicals.

### **Component A:**

Symbol: Xi (irritant)

R36/38 Irritating to eyes and skin.

S24/25 Avoid contact with skin and eyes. S26 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice. S27/28 After contact with skin, take off immediately all contaminated clothing, and wash immediately with plenty of water. S36/37/39 Wear suitable protective clothing, gloves and eye/face protection.

### **Component B:**

Symbol: Xn (harmful)

R20 Harmful by inhalation. R36/37/38 Irritating to eyes, respiratory system and skin. R40 Limited evidence of a carcinogenic effect. R42/43 May cause sensitization by inhalation or skin contact. R48/20 Harmful: Danger of serious damage to health by prolonged exposure through inhalation.

S9 Keep container in a well-ventilated place. S23 Do not breathe fumes/aerosol. S25 Avoid contact with eyes. S26 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice. S36/37/39 Wear suitable protective clothing, gloves and eye/face protection. S45 In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible). S60 This product and its container must be disposed of as hazardous waste. S61 Avoid release to the environment. Refer to special instructions/safety data sheets.

Z1 Contains isocyanates: See information supplied by the manufacturer.

Persons who are exposed to GEOFOAM on a regular basis should undergo preventive medical examinations. Consult safety data sheets for additional information.

## **Packing:**

All forms of packing are approved to the danger goods regulation road (GGVS).

### **Component A:**

19 l in a can

24 l in a PE canister

### **Component B:**

19 l in a can

24 l in a PE canister

Other packing units on request.

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## **Storage, Shelf-Life:**

At least six months from date of delivery or twelve months from date of production when stored in a dry place between 10 °C and 30 °C. If this time is exceeded, we recommend having the material checked by Minova CarboTech for compliance with specification. When the material is warmed up, local overheating, e.g. at the container wall, must be avoided by any means.

## **Certificates and expertise:**

Approval of the German Mining Authority 62.12.22.67-7-4

The data in this sheet conform to our best knowledge and experience at the date of printing, which is indicated below. The state of knowledge and experience are evolving constantly. Please pay attention therefore, that you always refer to the current version of this data sheet.

The description of the product application in this sheet cannot take the special conditions and circumstances into account emerging from the individual case. Please check our product therefore in any case prior to use for its aptitude in the actual application. Application, use and processing of our product occur outside of our control capabilities. That is why they as well as the processing result achieved based on our information are exclusively subject to your own responsibility.

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