

HARD ROCK MINING

CarboThix Fast

TWO-COMPONENT SILICATE RESIN

DESCRIPTION

CarboThix Fast is a patented, instantly thickening, fast curing two-component silicate bulk resin for grouting of bolts.

Component A is a special sodium silicate with additives. Component B is a modified polyisocyanate.

Suitable for anchoring of bolts in the mining and construction sectors.

Used with Minova’s Hollow Bolts as part of UniPass Bolting Technology.



APPLICATION AND USE

- Grouting of rock bolts
- Grouting of cable bolts
- Filling of small rock fractures and voids
- Typical application temperature range: 15-30°C

ADVANTAGES

- Thixotropic property
- Fast reacting
- High strength
- Easy to pump
- Fast bolting capacity
- Full encapsulation of rock bolts
- Non-foaming
- CFC and halogen-free
- Environmentally tested
- Multiple monitoring investigations performed for occupational health limits

TECHNICAL DATA

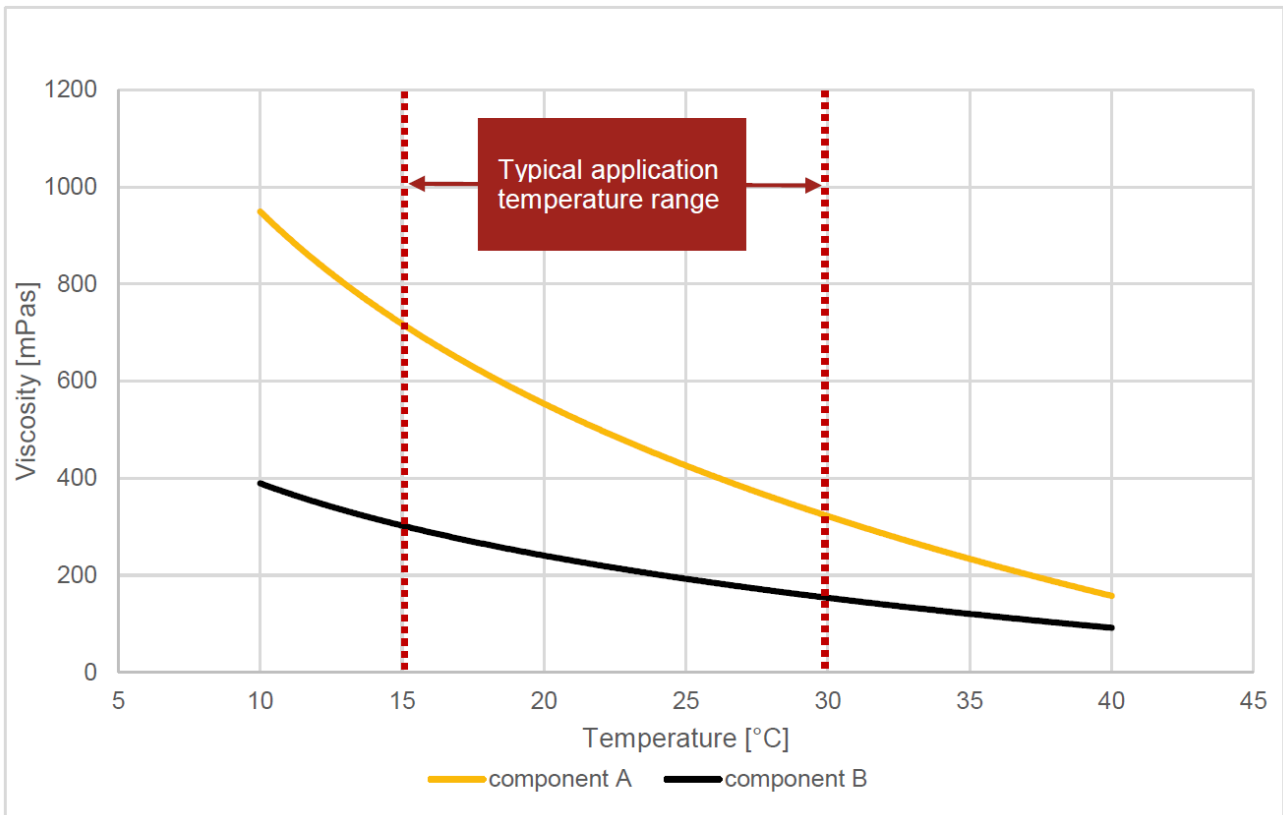
Our Minova products undergo stringent laboratory and field testing to ensure consistent and high quality.

MATERIAL DATA

Parameter	Unit	Comp. A	Comp. B	Standard
Density at 25 °C	kg/m ³	1450 ± 50	1160 ± 50	DIN 12791-1
Colour	-	brownish	dark brown	-
Flash point	°C	n. a.	> 100	EN ISO 1523
Viscosity at 25 °C	mPa*s	360 ± 60	190 ± 40	DIN EN ISO 3219

n. a. = not applicable

Viscosity as a function of temperature (EN ISO 3219)



REACTION DATA

Temperature	Unit	Flow time	Setting time	Test method
15 °C	sec	12 ± 4	115 ± 40	MCT PV 10/318
25 °C	sec	5 ± 2	80 ± 15	MCT PV 10/318
35 °C	sec	2 ± 2	65 ± 15	MCT PV 10/318

MECHANICAL DATA

Temperature	Unit	Value	Standard
Compressive strength*	MPa	≥24	EN ISO 604
Pull out strength**	kN	>350	DIN 21 521

* at 25°C, >70% rel. humidity, after 1 d.

** 600 mm grouted length of 32 mm diameter SDA in a 42 mm hole after 15 min.

APPLICATION METHOD

The two components are pumped with a dual component pump at a volumetric ratio of 1:1 and mixed through a static mixer.

The optimum processing temperature for CarboThix Fast is between 15 and 30°C.

If the components are cooled (below 0°C), they must be tempered before the use, to allow both components to reach the processing temperature.

Please refer to the CarboThix Product Information Document for further information.

SAFETY INSTRUCTIONS AND LIMITATIONS

Observe the usual precautionary measures for handling chemicals and refer to Component A and B SDS.

PACKAGING AND TRANSPORTATION

Carbothix is supplied in colour coded drums with a handle and secure cover lid.

Product	Drum Size	Drum Colour
Component A	24 kg	White
Component B	19 kg	Red

The drums for the A and B components are clearly distinguished by colours and labeling. CarboThix Fast is also available in 1,000L IBC's.

STORAGE AND SHELF LIFE

At least six months from date of delivery or twelve months from date of production when stored in dry conditions.

If this time is exceeded, it is recommended having the material checked by Minova for compliance with specification.

STORAGE CONDITIONS

Store in a cool, dry place between 5°C and 40°C away from direct sunlight. Avoid humidity entering by storing in a ventilated room and keeping seals tightly closed when not in use

DISPOSAL

Dispose of contents/container in accordance with local/regional/national regulations.

HEALTH AND SAFETY

For further information see the relevant material safety data sheet, copies of which are available on our website.

TECHNICAL SUPPORT

We provide technical advisory service by a team of specialists in the field. The service includes on site assistance and advice on evaluation trials and laboratory work.

APPROVALS AND CERTIFICATES

1. Assessment of relevant combustion gases at range of high temperatures (250°C, 530°C, 725°C) acc. EN ISO 5659-2 'Plastics — Smoke generation — Part 2: Determination of optical density by a single-chamber test' + EN 45545-2 'Railway applications. Fire protection on railway vehicles. Requirements for fire behavior of materials and components'
2. Assessment of hazardous ingredients leaching + effect on micro-organisms
3. Assessment related to the long-term performance of cured resin (TOC, Loss- On- Ignition) acc. EN 13137:2001-12 'Characterization of waste - Determination of total organic carbon (TOC) in waste, sludges and sediments', EN 12879 (S 3a):2001-02 'Characterization of sludges - Determination of the loss on ignition of dry mass'

MANUFACTURER

Minova Australia Pty Ltd

An ISO 9001: 2015 Quality Management Certified Company



FS 603747

ADDITIONAL INFORMATION

Minova Australia offers a comprehensive range of products, all of which have been developed after extensive research and testing on a global scale via our international network of operations. These products include:

- Resin anchor systems
- High yield grouts and foams
- Monolithic chock systems
- High performance cable bolt grouts
- Polyurethane resin systems
- Sprayable coatings for ventilation control
- Water stop grouts
- Ventilation formwork systems including: Meshblock and Tecmesh
- Grout mixers and batchers both air and hydraulically operated
- Contract Installations
- Flexible membranes for strata support and waterproofing applications

CUSTOMER SERVICE & SUPPORT

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