

MINOVA

CARBOThIX

RAPID

TWO COMPONENT SILICATE RESIN

DESCRIPTION

CarboThix Rapid 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 the anchoring of bolts in the mining and construction sectors. Used with Minova's Hollow Bolts as part of the UniPass Bolting Technology.

APPLICATIONS AND USES

- > Grouting of rock bolts
- > Grouting of cable bolts
- > Filling of small rock fractures and voids
- > Typical application temperature range: 5-15°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

APPLICATION METHOD

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

The optimum processing temperature for CarboThix Rapid is between 5 and 15°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.

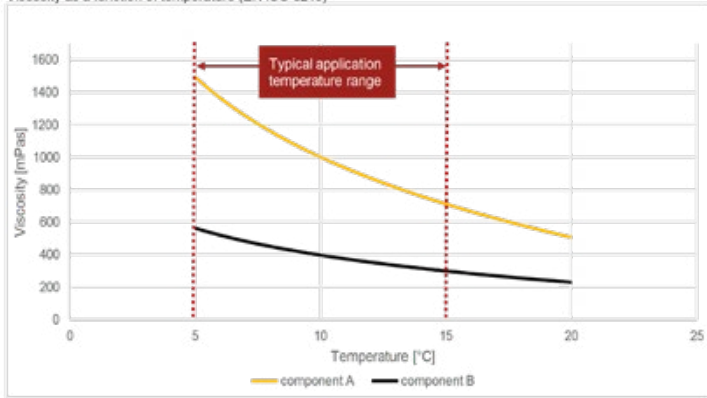
TECHNICAL DATA

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

TECHNICAL PROPERTIES

PARAMETER	UNIT	COMP A	COMP B	STANDARD
Viscosity at 77°F (25 °C)	Kg/m ³	1360 ± 50	1160 ± 50	DIN 12791-1
Color	-	Brownish	Dark Brown	-
Flash Point	°C	N/A	>100	EN ISO 1523
Viscosity at 77°F (25 °C)	mPa*s	340 ± 50	190 ± 50	EN ISO 3219

Viscosity as a function of temperature (EN ISO 3219)



MECHANICAL DATA

PARAMETER	UNIT	VALUE	STANDARD
Compressive strength*	MPa	≥22	EN ISO 604
Pull-out strength**	kN	>300	DIN 21521

*at 15°C, >70% relative humidity, after 24 hours.

** 600 mm grouted length of 32 mm diameter SDA in a 42 mm hole after 4h; resin temperature ~12°C

REACTION DATA

TEMPERATURE	UNIT	FLOWING TIME	SETTING TIME	TEST METHOD
5 °C	Sec	18 ± 5	31 ± 6	MCT PV 10/318
10 °C	Sec	11 ± 4	27 ± 5	MCT PV 10/318
15 °C	Sec	9 ± 3	20 ± 5	MCT PV 10/318

SAFETY INSTRUCTIONS AND LIMITATIONS

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

DISCLAIMER

All information contained in this document is provided for informational purposes only and is subject to change without notice. Since Minova cannot anticipate or control the conditions under which this information and its products may be used, each user should review the information in the specific context of the intended application. To the maximum extent permitted by law, Minova specifically disclaims all warranties express or implied in law, including accuracy, non-infringement, and implied warranties of merchantability or fitness for a particular purpose. Minova specifically disclaims, and will not be responsible for, any liability or damages resulting from the use or reliance upon the information in this document.

PACKAGING AND TRANSPORTATION

All forms of packaging are approved according to the dangerous goods regulations for road, railway, and shipping – refer to section 14 of the SDS. CarboThix Rapid is delivered in 20/26/200/1000 litre units.

Other packaging is available upon request.

STORAGE AND SHELF LIFE

The product shelf life is 18 months from the date of production.

The warranty of the component parameters is six months from the date of delivery when stored in dry conditions, in unopened and tightly closed original containers, at the temperature between 10°C and 30°C.

DISPOSAL

Follow local regulations.

MANUFACTURER

Minova USA Inc

An ISO 9001:2015

Quality Management Certified Company
Certificate No. FM 686583

Original Registration Date: 1995-02-15

Expiry Date: 2028-02-14



CUSTOMER SERVICE

Minova USA Inc

150 Summer Court

Georgetown, Kentucky

KY 40324

Email: minovana.customerservice@minovaglobal.com