

Adhesives, hardeners, coatings, high-temperature silicone

## SILCADUR / SILCASIL adhesives

B 90, U 95, 126 hardener, 130 coating, 130 adhesive, B 165S, CSMH, 320

**SILCADUR products** are specifically adapted to the wide range of our insulating materials in respect of temperature resistance and the particular application.

The quality of a refractory lining or a technical thermal insulation is crucially determined by the mortars, adhesives, hardeners and other auxiliary agents. High-quality raw materials and appropriate bonding systems are a prerequisite for the thermal stability. Good homogeneity, adhesion and workability are the basis for a cost-effective assembly.

**SILCADUR** products are to be stored and transported frost-free (min. +5 °C). Unless otherwise stated, the shelf life of unopened packages is six months. Opened packages have to be tested for their suitability before use.

**SILCASIL 320** is a high-temperature silicone with excellent adhesive strength and a high temperature-resistance of up to 320 °C. The product is available in resealable tubes of 100 ml or cartridges of 310 ml.

### SPECIAL FEATURES

- homogeneous
- ready for use
- high temperature resistance
- good adhesive power
- good chemical resistance

Designation	Type of material	Temperature limit of application	Density	Consumption	Consistency	Packaging unit	Shelf life at 5 – 20 °C
		°C	kg/m <sup>3</sup>	kg/m <sup>2</sup>			Months
SILCADUR-B 90 adhesive	Two-component adhesive	1,000	1,900	-	powdery	Bucket 20 kg	6
SILCADUR-U 95 adhesive	Universal construction adhesive	950	1,500	-	pasty	Bucket 15 kg	12
SILCADUR 126 hardener	Surface hardener	1,100	1,280	0.6 – 1.2	liquid	Bucket 6 kg	6
SILCADUR 130 coating	Surface coating	1,300	1,200	1.5 *) 3 - 4.5 **)	creamy/ pasty	Bucket 5 l Bucket 10 l	12
SILCADUR 130 adhesive	Adhesive	1,300	-	1.5	pasty	Bucket 5 kg Bucket 10 kg	9
SILCADUR-B 165S adhesive	Adhesive mortar filler	1,500	2,200	-	creamy/ pasty	Bucket 25 kg	12
SILCADUR-CSMH adhesive	Adhesive	1,300	1,580	-	creamy/ pasty	Cartridge 310 ml Can 500 ml	12
SILCASIL 320	Silicone grey	320	1,150	-	-	Cartridge 310ml Tube 100 ml	12

\*) Vacuum moulds (1 mm); \*\*) fibre modules (2 - 3 mm)

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### SILCADUR-B 90 adhesive

Powder-form two-component adhesive prepared by mixing with water. The product has proven to be suitable for the bonding of **SILCABLOCK** and **SILCA-PACK** on expanded metal grids. It has good adhesive properties and also provides acid resistance for the expanded metal grid. At assembly the consistency of the adhesive can be set to the desired level. After hardening **SILCADUR-B 90** is waterproof.

### SILCADUR-U 95 adhesive

Pasty high temperature adhesive ready for use. It can be used as a mounting aid for **SILCAL** and **SILCAMIN** boards but not for overhanging sections. As a result of its composition from inorganic sodium silicate **SILCADUR U95** is soluble in water to a limited extent.

### SILCADUR 126 hardener

Inorganic liquid ready for use that can be applied by brush or roller or even be sprayed on. **SILCADUR 126 hardener** serves for the strengthening of fibre surfaces from aluminium silicate and alkaline earth silicate wools. After drying it improves the fibre adhesion to the surface, especially with particle-free exhaust gas at high velocities.

### SILCADUR 130 coating

Ready-to-use coating for the surface treatment of products based on aluminium silicate and alkaline earth silicate wool. Its creamy consistency permits it to be applied by brush. A maximum of 5 % water may be added. At room temperature the coating sets on contact with air. When applying to vacuum formed products make sure that only the pores on the surface are sealed. In order to avoid spalling of the coating the maximum layer thickness should not exceed one millimetre.

### SILCADUR 130 adhesive

Ready-to-use adhesive for the bonding of products based on aluminium silicate and alkaline earth silicate wool to different surfaces. Its pasty consistency permits it to be applied by trowel or brush. At room temperature it sets on contact with air. Where necessary up to 5 % of water can be added. Porous surfaces have to be prewetted.

### SILCADUR-B 1655 adhesive / mortar filler

Ready-to-use mortar filler for refractory bricks or light-weight refractory bricks. It must be mixed thoroughly before use.

### SILCADUR-CSMH adhesive

Assembly and repair adhesive on inorganic basis for application with maximum temperature of 1,300 °C. For the bonding of dense calcium silicates and other refractory construction materials or as mounting aid for the bonding of metals. The drying time depends on the ambient temperature and humidity and at least 24 hours should be allowed.

### SILCASIL 320 high temperature silicone

**SILCASIL 320** can be applied to most surfaces, e. g. to metal, ceramics or mineral building materials, provided these are load-bearing, clean and dust-free. The product may not be subjected to temperature loading until it has dried completely.



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SILCADUR			B 90 adhesive	U 95 adhesive	130 coating	130 adhesive	B 1655 adhesive	CSMH adhesive
Electric mixing			X <sup>***</sup> )	X	X	X	X	X
Spraying			-	-	X	-	-	-
Processing with brush			-	X	X	X	-	-
Processing with trowel			X	-	-	X	X	X
Bonding of	Fibre mats		-	-	-	X	-	-
	Fibre modules		X	-	-	X	X	-
	Fibre strips		X	-	-	X	X	-
	Fibre felts		-	-	-	X	-	-
	Fibre papers		-	-	-	X	-	-
	Light-weight refractory bricks		-	-	-	-	X	-
	Calcium silicate - light		-	X <sup>**</sup> )	-	-	-	-
	Calcium silicate - dense		-	-	-	-	-	X
Suitable surface	Fibre modules		-	-	X	-	-	-
	Vacuum moulds		-	-	X	X	-	-
	Light-weight refractory bricks		-	-	X <sup>*)</sup>	X <sup>*)</sup>	X	X
	Refractory walls		-	-	-	X	X	X
	Refractory concrete		-	-	-	X	X	X
	Metal surface		-	X <sup>**</sup> )	-	X	-	X <sup>**</sup> )
	Expanded metal grids		X	-	-	-	-	-
Chemical analysis (dry)	SiO <sub>2</sub>	%	90	68	< 18	> 55	50	-
	Al <sub>2</sub> O <sub>3</sub>		3	16	> 75	> 35	42	-
	P <sub>2</sub> O <sub>5</sub>		2.5	-	-	-	-	-
	Na <sub>2</sub> O + K <sub>2</sub> O		3.1	14	< 8	< 5	2.8	-
	Fe <sub>2</sub> O <sub>3</sub> + TiO <sub>2</sub>		-	<1	-	< 2	3.7	-
	CaO + MgO		-	<1	< 1	-	0.8	-
Remarks			<sup>*)</sup> porous surface must be pre-moistured <sup>**)</sup> use as mounting aid <sup>***)</sup> trowel or electric mixer					

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