

**TECHNICAL DATA SHEET 08.03.03-ENG****RENOVATION AND REPAIR PLASTERS, MORTARS FOR CONCRETE REPAIR****JUBOSAN C130**

Final mortar coat within concrete-repair system JUBOSAN C

**1. Description**

JUBOSAN C130 is a micro-fibre-reinforced, industrially manufactured dry mortar mixture for constructional repair. It is made of hydraulic binder material and enriched with polymers. It is intended for the repair of flat damages and the fine levelling of concrete substrates. More specifically, it is used as the thin-coat render within the composite system of concrete repair i.e. mainly replication (of original state) and filling.

**2. Packaging**

paper bags per 25 kg

**3. Technical data**

Time of treatment T = +20 °C, rel. air humidity = 65 % (days)	~3
Compressive strength classification : EN 1504-3 (MPa)	>25 (class R3)
Content of chloro-ions	< 0.05 (class R4/R3)
Bulk weight of hardened mortar (kg/dm <sup>3</sup> )	~1.95
Capillary water absorption (kg/m <sup>2</sup> h <sup>0,5</sup> ) EN 13687-1	<0.5
Elastic modulus Classification : EN 13412	≥15
Resistance to carbonation ; d k = depth of carbonation EN 13295	d k ≤ referential concrete ( MC (0.45) ) (class R4/R3)
Adhesion Classification : EN 1542 (MPa)	>2 (class R4)

Main ingredients: cement, polymer binder, calcite sands, polymer fibres

**4. Substrate preparation**

The concrete substrate must be dry, sound and solid as well as clean, free of mould oil, free of weakly bound particles, dust, and other impurities. Before the application of JUBOSAN C130, grout wash (resp. cement laitance) must be removed from the surfaces.

A good adhesion is achieved by an according roughness of the substrate, the more in average the better. Roughness below 0.4 mm is not suitable.

The substrate shall be moistened with water before the application of JUBOSAN C130 that much that the concrete is not absorbing it anymore. It has to completely soak the water, on the surface any water membrane or drops must not be visible. Any of these would rule out the adhesion of JUBOSAN C130 on the substrate.

## 5. Preparation of the mortar mixture for application

It is prepared by adding the paper bag's content (25 kg) to about 4.5 litres of water with stirring. Perform stirring in a suitable container with an electric mixer (low RPM). Smaller amounts may be mixed manually. Anyway, no air shall be stirred into. After 2-3 minutes of stirring, let it swell up 5 minutes and stir again – add water only if necessary at all.

Under normal conditions (T = +20 °C, rel. air humidity = 65 %), the mixture's pot life amounts to 45 minutes.

## 6. Application of Mortar

The mortar is applied with a trowel in a way of rubbing it in. The thickness of a coat shall be at least 1 mm up to 5mm. If the mortar is applied several times (i.e. coats), the previous coats must well adhere to each other and to the substrate. In order to enable good adhesion the surfaces shall be rough not levelled (see above in 4.). Follow also instructions regarding moistening of each dry substrate. The last coat shall be levelled with a trowel assembled with foam (sponge) or with a piece of EPS without adding any water.

The application of the mortar is possible only under suitable weather resp. micro-climatic conditions: the temperature of air and substrate shall be  $\geq +5^{\circ}\text{C}$  and  $\leq +30^{\circ}\text{C}$ , the relative air humidity not above 80%. The external wall surfaces shall be protected from sun, wind and precipitation with facade netting. Still no works shall be performed when rain, fog or wind of  $\geq 30$  km/h.

The newly applied mortar's resistance to precipitation is achieved after 24 hours under normal conditions (T = +20 °C, rel. air humidity = 65 %). Under strong, intense sunlight and strong wind, the mortar has to be protected from desiccation. The newly applied coat shall be well treated.

The dry application of JUBOSANA C130 shall be treated at least 3 days, in case of higher temperatures and lower humidity however 7-10 days. 'Treatment' means taking care of sufficient moisture of the cement product (JUBOSAN C130): moistening, covering the applied product with suitable felt and foil.

Average consumption (coat of 1 mm):

Jubosan C130 ca. 2 kg/m<sup>2</sup>

## 7. Cleaning of tools, waste treatment

Thoroughly clean the tools with water immediately after use.

Keep the unused dry compound for potential later use. Useless remains should be mixed with water and when hardened deposited onto the dumping grounds of construction waste (waste classification number: 17 09 04).

Cleaned packaging can be recycled.

## 8. Safety at Work



Apart from general instructions and regulations for construction or façade and painting works, please consider that the product contains cement and is therefore classified among dangerous preparations labelled with 'DANGER'. The content of chromium (Cr 6+) is below 2 ppm.

Protection of the respiratory system: the use of a safety mask in case a lot of dust is raised. Protection of hands and body: work clothing, preventive protection with a protection cream and the use of protective gloves are recommended in the case of prolonged exposure of hands. Protection of eyes: protective glasses or a safety mask.

FIRST AID:

Contact with skin: remove clothing, which has been wetted, and rinse the skin with water and soap. Contact with eyes: immediately widen the eyelids, rinse thoroughly with clean water (10 to 15 minutes), seek medical advice if necessary.

Ingestion: drink a little water several times, seek medical advice immediately.

Label hazard pictograms	<div style="display: flex; justify-content: space-around; align-items: center;"> <div style="text-align: center;">  <p>GHS05</p> </div> <div style="text-align: center;">  <p>GHS07</p> </div> </div> <p><b>Signal word:</b> Danger  <b>Hazard-determining components of labelling:</b>          - cement, Portland, chemicals          - calcium hydroxide (lime)</p>
Measures, warnings, and explanations for safety at work	<p><b>Hazard statements</b>          H315 – Causes skin irritation.          H317 – May cause an allergic skin reaction.          H318 – Causes serious eye damage.          H335 – May cause respiratory irritation.</p> <p><b>Precautionary statements</b>          P101 – If medical advice is needed, have product container or label at hand.          P102 – Keep out of reach of children.          P103 – Read label before use.          P261 – Avoid breathing dust/fume/gas/mist/vapours/spray.          P305 + P351 + P338 – IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.          P310 – Immediately call a POISON CENTER or doctor/physician.          P321 – Specific treatment (see on label).          P405 – Store locked up.          P501 – Dispose of contents/container in line with local/regional/national/ international regulations.</p>

Additional data:

The Safety Data Sheet is available on request.

## 9. Storage, transportation and shelf life

During transportation, protect the product against moistening. Store in dry and airy places, out of the reach of children!

Shelf life when stored in an originally sealed and undamaged packaging: at least 12 months.

## 10. Quality Control

The product's quality characteristics are determined by the internal manufacturing specifications as well as by the Slovenian, European and other standards. JUB ensures achieving of the declared or set quality level by the ISO 9001 system for total quality management and control, which has been implemented at JUB for many years and which comprises daily quality checks in its own laboratories, and occasionally at the Construction Institute in Ljubljana and at other independent expert institutions in Slovenia and abroad. During the manufacturing process, JUB strictly complies with the Slovenian and European standards for protection of the environment and for ensuring security and health at work, which is confirmed by the ISO 14001 and OHSAS 18001 certificates.



<b>Slovenia</b> <b>16</b>	
<b>Product Type Identification no.: 08-03-03</b> <b>Decl. of Performance no.: 01/16 JUBOSAN C130</b>	
<b>EN 1504:3</b> <b>Product of constructional repair of concrete: one-component cementitious mortar modified with polymers (PCC) for constructional repair, class R3</b>	
<b>Compressive strength</b>	<b>Class R3: <math>\geq 25</math> MPa</b>
<b>Chloro-ion content</b>	<b>Class R4 / R3: <math>\leq 0,05</math> %</b>
<b>Adhesion</b>	<b>Class R4: <math>\geq 2,0</math> MPa</b>
<b>Resistance to carbonation</b> d k = depth of carbonation	<b>Class R4 / R3: d k <math>\leq</math> referential concrete, MC (0,45)</b>
<b>Elasticity modulus</b>	<b>Class R3: <math>\geq 15</math> GPa</b>
<b>Thermal tolerance, 1st part:</b> <b>Adhesion after freeze and thaw in presence of salt</b>	<b>Class R4: <math>\geq 2,0</math> MPa</b>
<b>Capillary absorption</b>	<b>Class R4 / R3: w <math>\leq 0,5</math> kg/m<sup>2</sup> h<sup>0,5</sup></b>
<b>Fire class</b>	<b>Euro class F</b>
<b>Dangerous substances content</b>	<b>According to demands of section 5.4</b>

## 11. Other information

The technical instructions in this brochure are given based on JUB's experience and are given as a guideline for achieving optimum results. JUB cannot accept any responsibility for the damage caused by incorrect selection of a product, incorrect use or unprofessional work.

This technical sheet supplements and replaces all preceding editions. JUB reserves the right to change and supplement data in the future.

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