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TECHNICAL DATA SHEET 08.03.02-ENG
RENOVATION AND REPAIR PLASTERS, MORTARS FOR CONCRETE REPAIR

CE

JUBOSAN C120

Coarse filling and replication mortar – concrete-repair system JUBOSAN C

1. Description

JUBOSAN C120 is a dry, industrially manufactured, one-component mortar mixture. It is made of hydraulic binder material and enriched with polymers. It contains fibres which prevent shrinking and improve its physical properties.

It is intended for the repair of constructional damages of concrete components. Because of its thixotropic characteristic, it is especially suitable for use on vertical surfaces.

2. Packaging

Paper bags per 25 kg

3. Technical data

Time of treatment T = +20 ºC, rel. air humidity = 65 % (days)	~3
Compressive strength classification : EN 1504-3 (MPa)	>45 (Class R4)
Content of chloro-ions	< 0,05 (Class R4)
Bulk weight of hardened mortar (kg/dm^3)	~2,1
Capillary water absorption ($kg/m^2h^{0,5}$) EN 13687-1	<0,5 (Class R4)
Elastic modulus Classification : EN 13412	≥15 (Class R3)
Resistance to carbonation ; d k = depth of carbonation EN 13295	d k ≤ referential concrete (MC (0,45))
Adhesion Classification : EN 1542 (MPa)	>2 (Class R4)

Main ingredients: cement, polymer binder, calcite sands, cellulose thickener

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 C120, grout wash (resp. cement laitance) must be removed from the surfaces.

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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 C120 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 C120 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 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. The consistency shall be quite similar to a plastic modelling mass (e.g. like Plasticine).

Under normal conditions (T = +20 ºC, rel. air humidity = 65 %), the mixture's pot life amounts to 30-45 minutes.

6. Application of Mortar

The mortar is applied with a trowel in a way of rubbing it in (completely dry Jubosan C 110). The thickness of one coat may vary from 9 mm up to 45 mm. 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 application of the mortar is possible only under suitable weather resp. micro-climatic conditions: the temperature of air and substrate shall be ≥ +5ºC and ≤ +30ºC, 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 ≥ 30 km/h.

The newly applied mortar's resistance to precipitation is achieved after 24 hours under normal conditions (T = +20 ºC, 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 JUBOSAN C120 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 C120): moistening, covering the applied product with suitable felt and foil.

Average consumption (coat of 100 mm):	
JUBOSAN C120	ca. 20 kg/m^2

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.

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Label hazard pictograms	 GHS05  GHS07 **Signal word:** Danger **Hazard-determining components of labelling:** - cement, Portland, chemicals - calcium hydroxide (lime)
Measures, warnings, and explanations for safety at work	**Hazard statements** H315 – Causes skin irritation. H317 – May cause an allergic skin reaction. H318 – Causes serious eye damage. H335 – May cause respiratory irritation. **Precautionary statements** 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.

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.

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CE **ZAG 1404**
TKK Proizvodnja kemičnih izdelkov d.o.o. **Srpenica 1, SI-5224 Srpenica, Slovenia** **16** **Product Type Identification no.: 08-03-02** **Decl.of Performance no.: 01/16 JUBOSAN C120**
EN 1504:3 **Product of constructional repair of concrete: one-component cementitious mortar modified with polymers (PCC) for constructional repair, class R4**

Compressive strength	**Class R4: ≥ 45 MPa**
Chloro-ion content	**Class R4: ≤ 0.05 %**
Adhesion	**Class R4: ≥ 2.0 MPa**
Resistance to carbonation **d k = depth of carbonation**	**Class R4:** **D k ≤ referential concrete, MC (0.45)**
Elasticity modulus	**Class R3: ≥ 15 GPa**
Thermal tolerance, 1st part: Adhesion after freeze and thaw in presence of salt	**Class R4: ≥ 2.0 MPa**
Capillary absorption	**Class R4: w ≤ 0.5 kg/m2 h0.5**
Fire class	**Euro class F**
Dangerous substances content	**According to demands of section 5.4**

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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ISO 9001 Q-159
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