

TECHNICAL SHEET 15.01-eng

DAMP PROOFING COMPOUNDS

HIDROZOL

Watertight compound

1. Description, Application

HIDROZOL is industrially prepared compound intended for the manufacture of damp proofing compound for watertight protection of vertical and horizontal surfaces of water reservoirs, elements of sewage systems and similar buildings, as well as for protection of parts of buildings built into the ground – tunnels, culverts, supporting and pillar walls, concrete fences and similar against intrusion of soil damp and water.

It complies with requirements for buildings intended for extraction, storage and preparation of drinking water (Article 33 of the Rules on drinking water OGRS 26/2006, DVGW method: Technische Regeln, W 347, October 1999). As far as monolithic concrete walls are concerned, it assures quality watertight protection for the positive and negative water pressure (insulation coat can be on either side of the wall). However, in the case of walls made of concrete or brick boards, it only assures quality watertight protection for the positive water pressure (insulation coat on the “water side” of the wall applied on at least 10 mm thick cement render finish).

2. Packaging

Paper bags containing 20 kilos

3. Technical Data

Density of the ready-to-use mortar compound (kg/dm ³)	~1.6
Open time of the ready-to-use mortar compound T = +20 °C, relative air humidity = 65 % (hours)	~1.5
Coat thickness (mm)	Maximum 5
Adhesion to concrete EN 24624 (MPa)	>0.8
Resistance to positive water pressure pr EN 14 891/2006	No water penetration at coat thickness of 3 mm
Resistance to negative water pressure OER, item 12.7	No water penetration at coat thickness of 3 mm

Main ingredients: cement, polymeric binder, quartz fillers

4. Surface Preparation

Surface should be solid and clean - without dust and other non-adhered or badly-adhered particles, remains of panelling oils and other dirt. Suitable surfaces include all at least a month old fine coarse concrete surfaces and also at least a month old fine cement and solid – i.e. heavily reinforced with cement - lime-cement render finishes. Suitably roughen the surfaces that are too smooth (shot blasting, brushing, rough polishing). The surface may be moist, but not soaking. The application of watertight coats may begin only after the subsiding processes of buildings have finished since excess deformations of the surface, movements, cracks and the similar might be a source of irreparable damage.

5. Preparation of Damp Proofing Compound for Application

Pour the content of a bag into a suitable quantity of water (for the application with a brush: 270 to 300 ml/kilo of dry compound; for the application with a masonry smoothing trowel: 230 to 250 ml/kilo of dry compound). Stir well with an



electric mixer to obtain a homogenous compound without any lumps. Wait for 5 to 10 minutes for the compound to swell. Then stir it well again. If necessary, add little water.

In normal conditions ($T = +20\text{ }^{\circ}\text{C}$, relative air humidity = 65 %), the prepared mortar compound can be used for 1.5 hour.

6. Application

Apply the mortar compound in at least two coats, but it is usually applied in three or even more coats. Always apply the first coat with a masonry brush. Apply the second and the third coats onto the still moist lower coat - usually with a stainless steel masonry smoothing trowel, but they can also be applied with a masonry brush. Apply the compound into each following coat "square-on" the previous coat. The total thickness of applications should not exceed 5 mm. Additional processing of the surface is possible only in the case of three- or more-coat applications. In this case, process the last coat with a styropor, plastic or wooden masonry smoothing trowel in a similar manner than conventional fine lime-cement render finishes are processed: when it is semi-hardened, moisten it and smooth or trowel it with circular movements using a smoothing trowel. The thus processed surface is suitable for potential decorative protection of the damp proofing coat (painting, decorative tile coatings, application of suitable thin-coat decorative render finishes). It can be done after 3 to 5 days. Suitably protect surfaces laden with foot traffic against wear and tear and mechanical damages (with tile or other suitable floor coatings), which can be laid directly onto the damp proofing coat (always use elastic adhesives, e.g. AKRINOL ELASTIK).

The application of the mortar compound is possible only in suitable weather or microclimate conditions: the temperature of the air and the wall surface should be between $+5^{\circ}\text{C}$ and $+30^{\circ}\text{C}$ and the relative air humidity should be below 80 %. Protect façade surfaces from sun, wind and rainfall using protective scaffold nettings; however, do not conduct any work in rain, fog or strong wind ($\geq 30\text{ km/h}$) despite such protection. In conditions of quick drying, treat the processed surfaces with moistening for 2 to 3 days.

In normal conditions ($T = +20\text{ }^{\circ}\text{C}$, relative air humidity = 65 %), resistance of freshly processed surfaces to damage caused by precipitation (washing away of the application) is achieved in 24 hours at the latest.

Approximate or average consumption (for 1 mm thick layer):	
HIDROZOL	$\sim 1.5\text{ kg/m}^2$

7. Tool Cleaning, Waste Management

Thoroughly clean the tools with water immediately after use.

Keep the remainder of dry mortar compound in a well sealed packaging for potential repairs. Useless remains should be mixed with water and when hardened deposited onto the dumping grounds of construction waste (waste classification number: 17 09 04) or municipal waste (waste classification number: 08 01 12).

Cleaned packaging can be recycled.

8. Safety at Work


Apart from general instructions and regulations for construction and insulation works, please consider that the product contains cement and is therefore classified among dangerous preparations labelled as Xi IRRITANT. The content of chromium (Cr 6^+) is lower than 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.



Warning signs on the packaging	<p style="text-align: center;">Xi</p>  <p style="text-align: center;">IRRITANT!</p> <p style="text-align: center;">THE PRODUCT CONTAINS CEMENT!</p>
Special measures, warnings and observations for safe work	<p>R36/38 Irritating to eyes and skin. R41 Risk of serious damage to eyes.</p> <p>S2 Keep out of the reach of children. S24/25 Avoid contact with skin and eyes. S26 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice. S28 After contact with skin, wash immediately with plenty of water. S37/39 Wear suitable gloves and eye/face protection. S46 If swallowed, seek medical advice immediately and show this container or label.</p>

9. Maintenance and Restoration of Processed Surfaces

Processed surfaces do not require any special maintenance.

Restoration of processed surfaces includes a new, at least two-coat application of the damp proofing compound – see details in the “Application” chapter.

10. Storage, Transportation Conditions and Durability

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

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

11. 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.

12. 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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