

**TECHNICAL SHEET 08.02.04-ENG**

WATERPROOFING COMPOUNDS

HYDROSOL Express 1K

Ready-to-use watertight compound for waterproofing and decorative purposes

1. Description, Application

HYDROSOL Express 1K is an interior, ready-to-use, watertight elastic compound for waterproofing and decorative purposes. For decorative purposes, it can be used only on wall and ceiling surfaces, while in case of lining with stone or ceramic tiles it can be used on wall and floor surfaces. It can be used for water proofing of bathrooms, toilets, kitchens, and areas which get wet frequently or only occasionally. Through a combination of watertight compound and JUPOL Strong aesthetic and functional appearance of areas is achieved without tile joints and easy to clean. Adequate surfaces are the following: finely coarse concrete surfaces, fine cement and lime-cement renders, gypsum renders, gypsum-cardboard boards, existing stone or ceramic tile lining, high-quality mineral and dispersion levelling compounds, well-adhered old dispersion coatings, fibre-cement boards and similar. The product bridges cracks of up to 0.75 mm wide and enables completely watertight and flexible connections. The product is not suitable for use on surfaces which are constantly under water.

2. Packaging

Plastic containers holding 5 kg

3. Technical Data

Density of the ready-to-use mortar compound (kg/dm ³)	~1.5
Colour	white
Touch dry (hours) T = +20 °C, rel. air hum. = 65 %	~1.0 (~6 in case we imprint a mesh in the first coat)
Suitable for further treatment (hours) T = +20 °C, rel. air hum. = 65 %	~1.5 (~24 in case we imprint a mesh in the first coat)
Suitable for fixing ceramic tile lining (hours) T = +20 °C, rel. air hum. = 65 %	12-24 or after 4-5 days in case of use on non-absorbing surfaces
Minimum total thickness for achieving water-tightness (mm)	~1.0
Maximum thickness of application in one coat (mm)	~1.0
Initial tensile adhesion strength EN 14891:2012 (E) (MPa)	≥1.0
Tensile adhesion strength after water immersion EN 14891:2012 (E) (MPa)	≥0.5



Tensile adhesion strength after water immersion at +70 °C EN 14891:2012 (E) (MPa)	≥1.0
Tensile adhesion strength after limewater immersion EN 14891:2012 (E) (MPa)	≥0.5
Tensile adhesion strength after chlorinated water immersion EN 14891:2012 (E) (MPa)	≥0.5
Resistance to positive water pressure EN 14891:2012 (E) (g)	No water penetration, it absorbs ≤20
Filling capacity in standard conditions (mm) EN 14891:2012 (E) T = +23 °C, rel. air hum. = 50 %	≥0.75

Main ingredients: dispersion binding agent, carbonate fillers, thickeners, additives.

4. Surface Preparation

- a) If the material is applied as main water proofing prior to application of stone or ceramic tiles

Surface should be slightly coarse, solid, dry, and clean – without badly-adhered particles, dust, remains of panelling oils, fat, or other filth. Rough surfaces and the ones with sharp edges should be adequately grinded or levelled and smoothed, while overly smooth surfaces should be made adequately coarse (sandblasting, brushing, rough grinding, or application of AKRINOL Super grip). Prior to the application of HYDROSOL Express 1K, floor surfaces in particular should also be hoovered and all potential foreign bodies with sharp edges should be removed. The product is not suitable for use in buildings which are facing problems due to soaking or capillary rising damp.

In normal conditions (T = +20 °C, relative air humidity = 65 %), let the newly applied renders and levelling compounds dry or mature for at least 1 day for each mm of their thickness. Concrete surfaces should dry for at least a month. Remove all paints which get easily soaked in water, from already painted surfaces. Surfaces infected with wall mould must be disinfected prior to applying watertight compound.

The use of watertight compound on extremely weak surfaces (weak renders and weak levelling compounds), which can be removed already by light cutting or with removal of protection strips is not allowed. In case of very absorbent surfaces (gypsum-cardboard boards, gypsum renders, fibre-cement boards, etc.), it is mandatory to use a primer. We recommend water-diluted AKRIL Emulsion (AKRIL Emulsion : water = 1 : 1) or water-diluted JUKOLprimer (JUKOLprimer : water = 1 : 1). When using watertight compound on existing stone or ceramic tile lining or on extremely smooth and non-absorbing surfaces we recommend the use of rough primer AKRINOL Super grip. Apply the primer with paint or masonry brush or a long-fibre fur or textile paint roller or spray it (spraying can be used only when applying AKRIL emulsion and JUKOL primer). In normal conditions (T = +20 °C, relative air humidity = 65 %), the application of HYDROSOL Express 1K watertight compound may begin 6 (AKRIL Emulsion and AKRINOL Super grip) or 12 (JUKOL primer) hours after the application of the primer.

- b) If the material is applied as waterproofing and decorative protection on existing ceramic tile lining

Ceramic tiles should be well adhered to the surface, without hollow sound, dry, and clean – without badly-adhered particles, dust, remains of different oils, fat, or other filth. Tile joints on existing ceramic tile lining must be levelled with the ceramic



tile level (they must not be sunk, as this can be reflected in final appearance of decorative processing). For filling and levelling tile joints, we recommend the use of highly elastic dispersion tile joint filler AKRINOL fugamix. If existing tile joints are infected with mould, they should be adequately disinfected prior to levelling. Prior to applying the waterproofing compound, the existing ceramic tile lining should also be processed with AKRINOL Super grip. Very unevenly applied ceramic tile lining which rise from the surface for more than $\pm 0.5\text{mm}/0.1\text{m}; 1\text{m}$ or 2m is not suitable for processing with the aforementioned waterproof compound.

Primer is applied by using a painting or masonry brush, with long-bristle fur or textile painting roller. In normal conditions ($T = +20\text{ }^{\circ}\text{C}$, rel. air hum. = 65 %), the application of waterproof compound HYDROSOL Express 1K can start 6 hours after applying AKRINOL Super grip.

c) If the material is applied as decorative protection of classically processed walls

Surface should be slightly coarse (ideal is the roughness of a conventionally smoothed fine render of 1.0 mm granulation), solid, dry, and clean – without any badly-adhered particles, dust, remains of panelling oils, fat, or other filth. Rough surfaces should be adequately levelled and smoothed, while overly smooth surfaces should be made adequately coarse (sandblasting, brushing, rough grinding, or application of AKRINOL Super grip). When using the waterproofing compound as decorative protection special attention must be paid to the surface preparation (levelness of connections between gypsum-cardboard boards or levelness of existing renders and levelling compounds must not deviate from the flat surface for more than $\pm 0.5\text{mm}/0.1\text{m}; 1\text{m}$ or 2m). The surfaces must be levelled as nicely as possible, without bulges and crests; if necessary, they can also be previously grinded and cleaned from dust. The product is not suitable for use in buildings which are facing problems due to soaking or capillary rising damp.

In normal conditions ($T = +20\text{ }^{\circ}\text{C}$, relative air humidity = 65 %), let the newly applied renders and levelling compounds dry or mature for at least 1 day for each mm of their thickness. Concrete surfaces should dry for at least a month. Remove all paints which get easily soaked in water, from already painted surfaces. Surfaces infected with wall mould must be disinfected prior to applying watertight compound.

The use of watertight compound on extremely weak surfaces (weak renders and weak levelling compounds), which can be removed already with light cutting or with removal of protection strips is not allowed. In case of extremely absorbent surfaces (gypsum-cardboard boards, gypsum renders, fibre-cement boards, etc.), it is mandatory to use a primer. We recommend water-diluted AKRIL Emulsion (AKRIL Emulsion : water = 1 : 1) or water-diluted JUKOLprimer (JUKOLprimer : water = 1 : 1). When using watertight compound on existing stone or ceramic tile lining or on extremely smooth and non-absorbing surfaces we recommend the use of rough primer AKRINOL Super grip. Apply the primer with paint or masonry brush or a long-fibre fur or textile paint roller or spray it (spraying can be used only when applying AKRIL emulsion and JUKOL primer). In normal conditions ($T = +20\text{ }^{\circ}\text{C}$, relative air humidity = 65 %), the application of HYDROSOL Express 1K watertight compound may begin 6 (AKRIL Emulsion and AKRINOL Super grip) or 12 (JUKOL primer) hours after the application of the primer.

Approximate or average use (depending on absorption and roughness of the surface):

AKRIL Emulsion	90 - 100 g/m ² or
JUKOL Primer	90 - 100 g/m ²
or	
AKRINOL Super grip	100 - 150 g/m ²

5. Preparation of watertight compound for application

Only stir the waterproofing compound well before use. When applying the compound with painting brush, it can be diluted up to 5 % with water.



6. Application Instructions

- a) As main waterproofing agent prior to application of stone or ceramic tiles

Waterproofing compound is applied in two coats, with total thickness of at least 1.0 mm. The first and second coat can be applied with a masonry brush, smoothing trowel or by spraying (in case of reinforcing, the first coat is applied with notched smoothing trowel); the thickness of each coat is app. 0.5 mm. We recommend checking the thickness during application by using a comb for measuring thickness of wet film. Each coat of the compound is applied to a dry previous coat; in normal conditions ($T = +20\text{ }^{\circ}\text{C}$, rel. air hum. = 65 %) the drying time is 1 to 2 hours. In each subsequent coat, the compound is applied »perpendicularly« to the previous application. For use on floor surfaces and when using the product on existing stone or ceramic tiles, we recommend reinforcing of surfaces with JUBIZOL vinyl-covered glass fibre mesh (grit size: at least 160 g/m²; windows: approximately 4 mm x 4 mm), which is imprinted in still fresh first application of waterproofing compound. Special elastic sealing strips and sheets are installed above dilatation cracks, into joints of vertical and horizontal surfaces, into tubular and other breaches; they are also imprinted into still fresh first coat of the waterproofing compound. The product is not suitable for use on self-adhesive strips! App. 12 hours after the application of the second coat the surface is ready for the installation of ceramic tiles. We recommend the use of the following adhesives: AKRINOL Uniflex, Elastic or Flex.

Approximate or average use (for 1.0 mm thick coat):

HYDROSOL Express 1K	~ 1.3 kg/m ²
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- b) As decorative protection of periodically wet and humid areas

Waterproofing compound is applied in two or three coats, with total thickness of at least 1.0 mm. The first and second coat can be applied with a masonry brush, smoothing trowel or by spraying (in case of reinforcing, the first coat is applied with notched smoothing trowel); the thickness of each coat is app. 0.5 mm. We recommend checking the thickness during application by using a comb for measuring thickness of wet film. The compound is applied to a dry previous coat; in normal conditions ($T = +20\text{ }^{\circ}\text{C}$, rel. air hum. = 65 %) the drying time is 1 to 2 hours (~24 hours in case a mesh is imprinted into first coat). The compound is always applied to the previous preceding application. When using the product on existing stone or ceramic tiles, we recommend reinforcing of surfaces with JUBIZOL vinyl-covered glass fibre mesh (grit size: at least 160 g/m²; windows: approximately 4 mm x 4 mm), which is imprinted in still fresh first application of waterproofing compound. Special elastic sealing strips and sheets are installed above dilatation cracks, into joints of vertical and horizontal surfaces, into tubular and other breaches; they are also imprinted into still fresh first coat of the waterproofing compound. The product is not suitable for use on self-adhesive strips! The first coat prior to the application of second one, and same with the second and third coat, is grinded with fine sandpaper. Grinding can be performed manually or by a machine (we recommend using a pneumatic grinder). The product can also be grinded with vibration and rotation grinders. One can choose among sandpapers No. 80 to 150. WARNING: The product is rather harder to grind than common levelling compounds, Therefore, we recommend applying it and levelling it as nicely as possible, as smooth as possible without bulges and crests. Prior to applying the paint, dust should be adequately removed from the surface (by sweeping or by blowing away). In the end, paint the surface twice with JUPOL Strong – a paint extremely resistant to mechanic rubbing. Before first rubbing and wetting of paint with water, we recommend drying the coating for at least 7 days. The coating reaches its final physical and chemical characteristics after a month. The system is not suitable for horizontal surfaces without protection with ceramic or stone lining.

Such treatment is appropriate also for more loaded surfaces such as shower cabins, kitchen surfaces, next to bath tub and washbowls. Both the watertight compound as well as final coating have additional biocidal protection which ensures processed surfaces a long-term resistance to inflection with wall mould. In order to maintain adequate system functionality restoration painting with the interior paint JUPOL Strong is necessary every 3 to 4 years. In case of high loads and



constantly high humidity, we recommend a restoration painting sooner, or immediately when damages are identified on the surface of paint film.

Approximate or average use (depending on absorption and roughness of the surface):

HYDROSOL Express 1K	1.5 – 2 kg/m ²
JUPOL Strong	160 - 190 ml/m ²

7. Tool Cleaning, Waste Management

Thoroughly clean the tools with water immediately after use: hardened remains can only be removed mechanically.

Keep unused watertight compound in a well-sealed packaging for potential repairs or later use. Waste remains should be deposited to dumping ground of construction or municipal waste (waste classification number: 08 01 11* or 20 01 27*). Cleaned waste packaging (waste classification number: 15 01 02) is collected separately and is handed into recycling to an authorised transferee or at assembly centres for waste of this kind.

8. Safety at Work

Respiratory protection with a protective mask and eye protection with protective glasses or a safety mask is necessary only when applying the paint by spraying. In addition to general instructions and regulations regarding safety for construction, facade and painting works, and the instructions stated in the Safety sheet, please consider also the following warnings:

Components determining hazard:

- It contains:

Zinc pyriithion

- Hazard statements

H412 Harmful to aquatic life with long lasting effects.

- Precautionary Statements

P102 Keep out of reach of children.

P103 Read label before use.

P273 Avoid release to the environment.

P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

P302+P352 IF ON SKIN: Wash with plenty of water.

P402+P404 Store in a dry place. Store in a closed container.

P501 Dispose of contents/container according to local/regional/national/international regulations.

- Additional data:

It contains 1,2-Benzisothiazol-3(2H)-one, methylisotiazolinon. It can cause allergic reaction.

Safety sheet available upon request. Hazard and precautionary statements are valid as of the day of issuing the Technical sheet.

9. Maintenance and Restoration of Decoratively Treated Surfaces

Painted surfaces do not require any special maintenance. Sweep, Hoover or wash with water non-adhered dust and other non-adhered filth. Adhering dust and more obstinate stains can be removed by light rubbing with a wet cloth or a sponge soaked in a solution of universal household cleaning agents. Then, the surface is washed with clean water

Restoration painting encompassing a new 2-coat application of JUPOL STRONG paint should be performed on surfaces that cannot be cleaned of filth and stains by following the method described above.




10. Storage, Transport Conditions and Durability

Storage and transport at temperature +5 °C to +25 °C, keep out of direct sunlight, out of reach of children, IT MUST NOT FREEZE!

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 Slovene, European and other standards. JUB is ensured the 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 our own laboratories, occasionally at the Construction Institute in Ljubljana and other independent expert institutions in Slovenia and abroad. During the manufacturing process, JUB strictly complies with the Slovene and European standards for the protection of the environment and for ensuring security and health at work, which has been confirmed by the ISO 14001 and OHSAS 18001 certificates.

	
JUB d.o.o. Dol pri Ljubljani 28 SI – 1262 Dol pri Ljubljani 17	
Identification code of the type of product: 08.02.04 Number of Declaration of performance: 001/17-HDI	
SIST EN 14891:2012 / AC 2013 Read-to-use watertight compound for interior surfaces (DM P)	
Resistance to positive water pressure	No water penetration
Initial tensile adhesion strength	≥ 0.5 N/mm ²
Tensile adhesion strength after water immersion	≥ 0.5 N/mm ²
Tensile adhesion strength after water immersion at +70 °C	≥ 0.5 N/mm ²
Tensile adhesion strength after chlorinated water immersion	≥ 0.5 N/mm ²
Tensile adhesion strength after limewater immersion	≥ 0.5 N/mm ²
Filling capacity in standard conditions	≥ 0.75 mm



12. Other Information

Technical instructions contained in this brochure are provided on the basis of JUB's experience and are given as a guideline to achieve the optimum results. JUB cannot accept any responsibility for 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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The product is made by the holder of ISO 9001:2008, ISO 14001:2004 and OHSAS 18001:2007 certificates

