UltraGel® Pro
Technical Specifications

Ready-to-use, elastic, crack-resistant multi-polymer gel, reinforced with quartz microspheres, Fluidotixo® - C4, prevents the formation of cracks when laying tiles, mosaics, porcelain stoneware and natural stone in interior applications.

Product description

Ready-to-use, elastic, crack-resistant multi-polymer gel, reinforced with quartz microspheres, which prevents the formation of cracks when laying tiles, mosaics, medium-sized porcelain stoneware and stable natural stone on floors and walls indoors. Reusable. Particularly suitable for damp areas subject to intermittent contact with water, such as bathrooms and shower cubicles. An innovative formula consisting of 100% pure gel in an H$_2$O phase, free from cement, ensures application directly onto gypsum-based substrates without the need for insulating primers. Characterised by excellent adhesion and a long working time. Designed for maximum convenience and ease of application, and thanks to state-of-the-art features, the mixture is extremely creamy, light and very easy to spread.

Classified as D2 TE – EN 12004

Proprietary gel formula

Elastomeric gel with a blend of styrene-acrylic resins under our own licence
3D structure with polymerised quartz microspheres and inorganic microfillers
High mineral aggregate content
Smart rheological stabilisers
Highly hydrophilic, latest-generation cellulose with high gelling power

UltraGel® Pro embodies Litokol's ongoing scientific progress
Designed using innovative raw materials to improve the installation experience, safety and reduce environmental impact.

Mix classification

Mix Class	Level of smoothness	Lightness index
C1 – Thick / Paste-like	Requires more force to apply	Standard
C2 – Medium Consistency	Offers good workability, but runs	Standard
C3 - Fluidotixo	Slippery and thixotropic	Light
C4 - Fluidotixo Dinamico	Highly flowable and thixotropic	Light

Gel Performance

High-performance, ready-to-use multi-polymer gel
Ultra-smooth application thanks to its 100% gel formula and highly spherical quartz microspheres, which contribute to quick and effortless application
3X elasticity; absorbs minor movements in the substrate, preventing the formation of cracks and fractures in the coatings
High adhesion to substrates
Extended workability time

Chemistry + Smart

Pure H_2O-based gel
Does not contain solvents and plasticisers
Not dangerous for applicators according to the CLP regulation
Not hazardous to the environment
Not hazardous for transport – ADR-compliant
Ready-to-use, reusable, prevents waste and material scraps
It maintains flexibility and all performance even after being opened and reclosed
Improves resource efficiency and avoids the disposal of unused product

Certifications

EN 12004
ISO 13007
EC1 Plus Gev Emicode
A+ Indoor air emissions
EPD Environmental Product Declaration

UltraGel® Pro and the environment

LCA results for Global Warming Potential – Greenhouse Gases (GWP-GHG)

Impact category	Unit	A1–A3	C1	C2	C3	C4	D
Climate change GWP-GHG	kg CO_2 eq	4,62 10^{-1}	1,70 10^{-3}	1,77 10^{-2}	6,42 10^{-4}	4,98 10^{-2}	-1,20 10^{-2}

Materials

Ceramic and glass mosaics
Porcelain stoneware
Ceramic tiles
Terracotta – Klinker
Stable marble and natural stone

Substrates

Screeds
Self-levelling compounds
Plaster
Plasterboard
Plaster and anhydrite
Radiant heating systems
Waterproofing products
Wood
Aerated concrete
Fibre-cement sheets
Concrete

Uses

Floors – walls
Interior
Radiant heating systems
Indoor wet areas – bathrooms and showers
Residential, public, commercial and street furniture

Limitations

Refer to national standards, such as UNI 11493.
Formulated with new-generation polymers in an aqueous dispersion, the product is sensitive to low temperatures. During transport and storage, it is essential to ensure temperature-controlled environments of no less than +5°C to preserve its advanced performance and the integrity of the technological matrix.
The product is a water-based dispersion and cures through the gradual release of water. Ensure that the substrate and tiles have sufficient absorbency to allow the gel to polymerise completely.
Do not apply to floors where rapid readiness for foot traffic is required.
Do not apply in layers thicker than 5 mm.
Temperature, ventilation, substrate absorbency and the substrate material may affect the workability and setting times of the gel.
Do not apply to damp surfaces or those subject to rising damp.
Do not use for laying non-absorbent tiles on non-absorbent substrates.
Do not use for laying ceramic tiles on external surfaces or surfaces in continuous contact with water, such as baths, swimming pools, etc.
Do not add lime, cement or other foreign materials to the product.
Do not use on metal, rubber, PVC or linoleum surfaces.
Do not use for the installation of large-format porcelain stoneware or large slabs.
Do not use for applications not listed on this technical data sheet.
For further information, please contact Litokol's Technical Customer Service on +39-0522-622811 or via customercare@litokol.com

Product specifications

Appearance	Polymer gel paste
Colour	White
Responsible Packaging	Second-life recycled plastic buckets, 5.10 kg
Shelf life	24 months in original packaging in a dry place. Keep away from frost
Customs heading	35069190

Technical Specifications

Compliance	**EN 12004 – ISO 13007**	**D2 TE**
Initial shear adhesion	≥ 1.0 N/mm^2	EN 1324
Shear adhesion after heat exposure	≥ 1.0 N/mm^2	EN 1324
Shear adhesion after exposure to high temperatures	≥ 1.0 N/mm^2	EN 1324
Shear adhesion after immersion	≥ 1.0 N/mm^2	EN 1324
Open time	≥ 0.5 N/mm^2 after 30 min	EN 1346
Slip	≤ 0.5 mm	EN 1308

Application Specifications

Mixing ratio	Ready-to-use gel
Consistency of the mix	Polymer Gel
pH of the mixture	7,5 - 8,5
Specific gravity of the mixture	1.60 kg/dm
Open time	> 30 minutes
Applicable thicknesses	From 1 to 5 mm
Application	Notched trowel suitable for the tile size and substrate
Permissible application temperatures	From +5°C to +35°C
Drying time for grouting	Wall 12 h – Floor 24 h
Ready for foot traffic	24 h
Commissioning	7 days
Operating temperature	From -30°C to +90°C
Cleaning of equipment	With water when the product is fresh. Mechanically once the product has hardened.
Coverage	3.5 mm trowel: 1.5 kg/m^2
Coverage	6 mm trowel: 2.5 kg/m^2
Coverage	8 mm trowel: 3 kg/m^2
Coverage	10 mm trowel: 3.5 kg/m^2
Notes	Data recorded at a temperature of +23 °C, 50% RH and in the absence of ventilation. These may vary depending on specific site conditions.

Preparation of substrates

In accordance with standard UNI 11493-1, substrates must be mechanically sound and free from crumbly parts, grease, oil, paint, wax and rising damp.
Cement-based plasters must be allowed to cure for at least one week per centimetre of thickness.
Cement-based screeds must have a total curing time of at least 28 days or be laid using the innovative X-Floor and X-Floor Pro crack-resistant screeds.
Dusty, porous and absorbent substrates must be treated with X-Prime®, an innovative fixative and consolidant.
In the case of anhydrite screeds, ensure that a suitable vapour barrier is in place to prevent any rising damp. Check using a carbide hygrometer that the residual moisture content is below 0.5%.

Any cracks or fissures must be sealed with CrackRepair.
In any case, it is essential to consult the relevant technical data sheets to ensure the correct use of the products indicated.

Preparation of the mix

UltraGel® Pro is a new-generation polymer gel, formulated to be ready for immediate use without the need for prior mixing.
Upon opening the container, however, it is recommended to quickly re-work the mixture, even manually, using a trowel or steel spatula, to ensure optimal homogeneity of the mixture and maximise its functional performance and application effectiveness.

Application

To ensure the gel adheres perfectly to the substrate, apply a thin, even coat of the mixture using the smooth side of the trowel and, immediately afterwards, apply the desired thickness using the notched side.
The notching of the trowel must be chosen according to the size of the material to be laid and the substrate.
In accordance with the UNI 11493-1 standard, use the double-coating technique, applying the gel to the back of the tiles as well to ensure complete wetting during installation in areas where the substrate may be subject to movement or expansion, or in areas subject to particularly high stress.
To ensure complete transfer of the gel to the back of the tiles, they must be laid onto the still-fresh adhesive whilst applying adequate pressure.
The open time under standard temperature and humidity conditions is approximately 30 minutes.
Very hot or windy conditions, or highly absorbent substrates, can drastically reduce this time to just a few minutes; it is therefore advisable to check frequently that the gel has not formed a surface film.
In accordance with the UNI 11493-1 standard, tiles must be laid with joints of a width appropriate to their size (minimum 2 mm).
Take account of any partition or structural joints and provide suitable expansion, partition and perimeter joints.

Special Applications

Marble, natural stone and engineered stone
Materials prone to deformation or staining due to water absorption require a hydro-curing gel with accelerated adhesion and fast setting, such as FastGel® or FastGel® S1+ (C2F – EN 12004), or a reactive gel such as PowerGel® Pro, FastGel® Pro or PowerGel® Pro Max (R2 – EN 12004).
Marble and natural stone, even of the same type, may have different characteristics. If in doubt, we recommend consulting Litokol's Technical Customer Service in advance for detailed information or to carry out a laboratory test. Natural stone slabs with reinforcing layers applied to the back (resins, reinforcing mesh, etc.) or specific treatments (e.g. anti-rising damp, etc.) require a compatibility test with the adhesive, unless otherwise specified by the manufacturer. Before installation, check for any traces of dust or debris on the back of the slabs. If present, these must be removed.

Heated flooring
At least 4 days after laying the X-Floor® or X-Floor® Pro anti-crack screed, you can start up the heating system with a supply water temperature ranging from +20°C to +25°C, maintaining it at a constant level for at least 3 days.

Then set the maximum design temperature and hold it for another 4 days. At the end of this cycle, bring the screed back to ambient temperature and install the covering (see standard EN 1264-4).

Grouting, sealing and maintenance

For grouting, X-Color® 0-6 or X-Color® 2-12 decorative grouts can be used.
To create waterproof joints with high colour fastness and superior chemical and mechanical resistance, use the decorative epoxy gels from the Starlike® range.
For the elastic sealing of expansion joints, partition joints and perimeter joints, use sealants from the Pixel 3D range.
For post-construction washing, cleaning, maintenance and surface protection, use the specific Litokol detergents from the X-Cleaner and Starlike® Care ranges.

Warnings

Due to the high adhesion, it is recommended to wash tools and remove any product residue from surfaces with water before the gel hardens. Once the reaction is complete and the gel has hardened, it can only be removed mechanically.

Safety Information

For the safe use of our products, please refer to the latest version of the Safety Data Sheet, available at www.litokol.com
PRODUCT FOR PROFESSIONAL USE

Legal notices

The information and specifications set out in this technical data sheet are based on our best experience.
However, as we are unable to directly influence site conditions or the execution of the works, these are general guidelines which do not in any way bind our Company.
We therefore recommend carrying out a preliminary test to verify the product's suitability for the intended use; in any case, anyone intending to use it is required to determine whether or not it is suitable for the intended use and, in any event, assumes all liability that may arise from its use.
Always refer to the latest updated version of the Technical Data Sheet, available on the website www.litokol.com

Specification item

The installation of floor and wall coverings indoors, in accordance with standards UNI 11493-1 and 11714-1, and the prevention of cracks in tiles, mosaics, porcelain stoneware and natural stone will be carried out using a ready-to-use, elastic, crack-resistant, multi-polymer gel that is resistant to vertical slippage and has an extended open time of over 30 minutes, classified as D2 TE in accordance with standard EN 12004, type UltraGel® Pro by Litokol Lab SpA.

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