Technical Datasheet

ISOMAT AK-60 PU

High-performance, ultra-flexible, two-component polyurethane adhesive for ceramic tiles and natural stone

Description

ISOMAT AK-60 PU is a high-performance, two-component, solvent-free, polyurethane ceramic tile and natural stone adhesive. Features high initial and final adhesion strength to various substrates, exceptional flexibility and no vertical slip.
Certified according to EN 12004 and classified as R2T adhesive. CE marked.

Fields of application

ISOMAT AK-60 PU is used for powerful bonding of ceramic tiles and natural stone to walls and floors. Applicable to a wide variety of absorbent and non-absorbent substrates, e.g. concrete, terrazzo, marble, old tile layers, gypsum and cement boards, metal surfaces, etc.
Ideal for substrates subject to vibration, expansion and contraction e.g. heated floors, metal surfaces, wooden floors, PVC, etc.
For indoor and outdoor applications.

Technical data

Chemical base:	2-component polyurethane resin
Form:	pasty
Color:	white
Viscocity (A):	1,500,000 - 2,000,000 mPa.s
Viscocity (B):	200 mPa.s
Viscocity (A+B):	120,000 - 200,000 mPa.s
Mixing ratio (A:B):	100:6.5 by weight
Density (A):	1.73 kg/l at+23ºC
Density (A+B):	1.60 kg/l at +23ºC
Pot life:	~ 60 min at 23ºC
Cleaning:	within 45 min at +23ºC
Walkability:	after 16 h at +23ºC
Grouting:	after 16 h at +23ºC
Minimum hardening temperature:	+10ºC
Partial loading:	after 48 h at +23ºC
Full loading:	after 7 days at +23ºC
Initial shear adhesion strength (after 7 days):	> 4.50 N/mm^2
Shear adhesion strength after water immersion (after 21 days):	> 4.50 N/mm^2
Shear adhesion strength after thermal shock:	> 2.00 N/mm^2
Slip:	≤ 0.5 mm
Service temperature:	from -40ºC to +70ºC

All measurements were conducted according to EN 12004.

Cleaning of tools:
Tools should be thoroughly cleaned with water after use and before any lengthy interruption of work.

Directions for use

1. Substrate preparation
The substrate should be dry, clean, stable, slightly rough and free of contaminants that may impair bonding such as dust, rust, grease, oil, loose particles, etc. If needed, it should be prepared by brushing, grinding, sandblasting, pellet blasting, etc., and when it comes to walls, by grinding with a wire brush or other similar handheld finishing tool.

2. Mixing
Components A (resin) and B (hardener) are packaged in separate, pre-measured containers. The entire contents of component B is added to component A. The two components should be mixed for approx. 5 minutes with a low speed mixer (300 rpm). It is important to stir the mixture thoroughly near the sides and bottom of the container to achieve uniform dispersion of the hardener.

3. Application
The tile adhesive should be spread (“combed”) over the substrate with a notched trowel, in order to be uniformly applied to the entire surface. Tiles should be firmly pressed to the desired position.

ISOMAT AK-60 PU

Consumption

1.0-3.0 kg/m^2, depending on the trowel notch size and the nature of the substrate.

Packaging

ISOMAT AK-60 PU is supplied in 3 kg and 10 kg containers, with fixed mixing ratio by weight. The container of comp. B is packaged into the container of comp. A.

Shelf life – Storage

12 months from production date, in original, unopened packaging, protected from direct sunlight, in dry conditions. Recommended storage temperature: +5°C - +35°C.

Remarks

- The working time of polyurethane systems is affected by ambient temperature. The ideal application temperature ranges between +10°C and +30°C, for which the product obtains optimal workability and curing time. Room temperature below +15°C will extend curing time, while temperatures above +30°C will reduce it. It is recommended to mildly preheat the product in winter and store the product in a cool room before application in the summer months.
- After hardening, ISOMAT AK-60 PU is completely safe for health.
- Please consult the safety instructions written on the packaging before use.

CE

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EN 12004:2007+A1:2012
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NB: 0370

Improved, reaction resin adhesive, for internal and external tiling.

Reaction to fire	NPD
Release of dangerous substances	See MSDS
Bond strength, as:	
- initial shear adhesion strength	≥ 2 N/mm^2
Durability, of	
- shear adhesion strength after thermal shock	≥ 2 N/mm^2
shear adhesion strength after water immersion	≥ 2 N/mm^2

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The technical information and instructions supplied in this datasheet are based on the knowledge and experience of the Research and Development Department of our company and on results from long-term applications of the product in practice. The recommendations and suggestions referring to the use of the product are provided without guarantee, since site conditions during the applications are beyond the control of our company. Therefore the user is responsible for confirming that the chosen product is suitable for the envisaged application. The present edition of this technical datasheet automatically cancels any previous one concerning the same product. | Edition: 27.11.2025