ADESILEX G19

Two-component, epoxy-polyurethane adhesive for resilient and textile flooring

WHERE TO USE

Extremely strong, tough, elastic, adhesive for general purpose use, particularly suitable for non-absorbent substrates or moisture-sensitive substrates (wood, metal, ceramic, stone, resin, PVC, rubber, etc.).
For use on floor in interior and exterior applications.
Specifically developed for the installation of rubber athletic tracks.
Also suitable as universal adhesive for rubber, PVC and all common resilient and textile floor covering types, especially in the event of extreme temperatures due to solar radiation, intense mechanical stress by lift truck, forklift, etc. or frequent washing (in particular when the floor coverings are not welded or sealed).

Some application examples

Use **Adesilex G19** for bonding:
· rubber athletic tracks and multisport flooring on asphalt;
· recycled rubber shock-absorbent flooring on asphalt in playgrounds;
· resilient flooring for indoor sports flooring, also onto waterproofing fiberglass underlays such as **Mapelay**;
· homogeneous and heterogeneous PVC, sheets and tiles;
· CV floor coverings;
· LVT;
· semi-flexible quartz vinyl floor tiles (VTC);
· textile floor coverings with all common backings (latex-primed, PVC and polyurethane foam, natural jute and Action-Bac® backed carpets etc.);
· needlepunch woven flooring also in latex;
· flocked textile flooring;
· linoleum with all kind of backings;
· polyolefin-based and chlorine-free floor coverings;
· PUR floor coverings.

TECHNICAL CHARACTERISTICS

Adesilex G19 is a two-component adhesive made from an epoxy-polyurethane polymer, component A, and a special hardener, component B.
When the two components are mixed together, they form an even coloured paste which is easy to apply with a suitable notched trowel.
After setting (around 24 hours), which takes place by means of a chemical reaction without any shrinking, **Adesilex G19** becomes though and resistant to moisture, water, heat and atmospheric agents, and adheres extremely well to almost all materials normally used in the building industry.

RECOMMENDATIONS

· Install in recommended temperatures, normally between +10°C and +30°C, in order to maintain workability and setting times.
· Do not install on substrates not protected from rising damp.
· Do not install flooring on not completely set or wet concrete (residual moisture content must be maximum 3.0%).

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· Do not install flooring on fresh asphalt (wait at least 20 days).
· Do not install flooring on bituminous surfaces which might bleed oils.
· Do not use on curved surfaces or steps if it is not possible to hold the flooring in perfect adherence against the substrate until the adhesive has set.
· When installing thin flooring where the ribs of adhesive may shadow through, use **Adesilex G20** or **Adesilex G20 Fast**.
· When a rapid adhesive with faster setting is needed, use **Adesilex G19 Fast**.

APPLICATION PROCEDURE

Substrate preparation

Substrates must be dry, level, sound, mechanically strong, free of dust, loose particles, cracks, paints, wax, oil, rust, traces of gypsum or other products that can interfere with bonding.
The regulations of each country must be strictly followed.
Commonly, the moisture content must be as follows: max. 2%-2,5% for cementitious substrates, max. 0,5% for gypsum or anhydrite-based substrates.
It is essential to make sure there is no rising damp present. Un-bonded screeds laid over light-weight concrete or over insulation and screeds laid directly onto earth must be separated by a vapour barrier to prevent rising damp.
To repair cracks in the substrate, consolidate and waterproof screeds, form new fast-drying screeds and level uneven substrates, please refer to the relevant MAPEI documentation or contact the Technical Services.
External cement based surfaces may be levelled off with **Planicrete** mixed with cement and sand (with suitable particle size) or with **Adesilex P4**.
Use **Adesilex G19**, **Adesilex G19 Fast**, **Adesilex G20** or **Adesilex G20 Fast** (eventually mixed with suitable quartz or crumbled rubber) for repairing or smoothing asphalt surfaces. In these cases install the flooring with **Adesilex G19** as soon as the smoothing layer is set enough to take light foot traffic.

Acclimatisation

Before starting the installation, make sure that the floor covering and substrate are acclimatised to the recommended temperatures and R.H..

Mixing the adhesive

The two components of **Adesilex G19** are supplied in pre-measured proportions:
· component A: 9.4 parts by weight;
· component B: 0.6 parts by weight.
Blend the two components together with a mechanical mixer until an even paste is obtained. Setting times and pot life depend on the ambient temperature (see table).
Setting times are much longer if the temperature is lower than +10°C.
Note: the resin (component A)/catalyser (component B) ratio must be strictly adhered to. Any variation in dosage will compromise the setting of the product.

Spreading the adhesive

The choice of trowel depends on the type of flooring to be installed and on the substrate: for smooth backings and smooth substrates use MAPEI No. 1 or TKB A1, A2 trowels; for textured and impervious backings and substrates use MAPEI No. 2, 3, 4 or TKB B1, B2, C1 trowels.
Only apply as much adhesive as can be covered within the open time (60 minutes) and with good transfer to the backing of the covering.

Installing the flooring

Follow the manufacturer's instructions for laying technique.
Lay in covering with short waiting time into the still wet adhesive bed: the adhesive ridge has to be impressed.
Take care to avoid air pockets and carefully rub the floor covering down to ensure good adhesive transfer to the backing.
Avoid excessive stress at the seams. After installing the floor covering, it is always necessary to carefully roll it down again or to firmly rub it down.
If the flooring is not perfectly flat, put weights (such as bags of sand or similar) on the uneven areas, and on the joints and roll ends until the **Adesilex G19** has hardened (12-24 hours).
Extra care must be taken when installing external flooring if there are high temperatures or high variations in temperature (install flooring during the cooler hours of the day).
Flooring bonded with **Adesilex G19** is ready for light foot traffic after around 12-24 hours, while the adhesive sets completely after around 72 hours at +23°C.
The setting time of **Adesilex G19** at different temperatures is the following:

Temperature in °C	+30	+25	+20	+15	+10	+5
Time in hours	4	6	8	10	20	36

CONSUMPTION

Consumption varies according to the flatness of the substrate and the type of backing on the flooring material (and, therefore, the type of trowel used):

· trowel No. 1 or TKB A1/A2: 350-450 g/m²;
· trowel No. 2 or TKB B1; B2: 450-550 g/m²;
· trowel No. 3 or TKB C1: 550-750 g/m²;
· trowel No. 4: 750-1000 g/m².

CLEANING

Adesilex G19 may be removed from flooring, tools, clothing etc. with alcohol before it hardens. Once hardened, it must be removed mechanically or with **Pulicol 2000**.

COLOUR

Adesilex G19 is available in the following colours: beige, red, green and black. Special colours available upon request (min. 600 kg).

PACKAGING

Adesilex G19 is supplied in 10 kg, 5 kg and 2 kg kits.

STORAGE

Adesilex G19 remains stable for at least 24 months under normal environmental conditions in its original, sealed packaging.

SAFETY INSTRUCTIONS FOR PREPARATION AND APPLICATION

Adesilex G19 component A is irritant for the eyes and skin. Both components A and B may cause sensitisation if they come into contact with the skin of those predisposed.
Adesilex G19 component B is corrosive and may cause burns, it is also harmful if swallowed or if it comes into contact with the skin. The product contains low molecular weight epoxy resins that may cause sensitisation if cross-contamination occurs with other epoxy compounds. When applying the product, use protective gloves and goggles and take the usual precautions for the handling of chemicals. If the product comes into contact with the eyes or skin, wash immediately with plenty of clean water and seek medical attention.
Adesilex G19 components A and B are also hazardous for aquatic life. Do not dispose of these products in the environment.
For further and complete information about the safe use of our product please refer to the latest version of our Material Safety Data Sheet.
PRODUCT ONLY FOR PROFESSIONAL USE.

TECHNICAL DATA (typical values)		
PRODUCT IDENTITY		
	component A	**component B**
Consistency:	thick paste	fluid liquid
Colour:	beige, red, green and black	transparent
Density (g/cm³):	1.5	0.92
APPLICATION DATA (at +23°C - 50% R.H.)		
Mixing ratio:	component A : component B = 94 : 6	
Density of mix (kg/m³):	1,450	
Pot life of mix:	50-60 minutes	

Application temperature range:	from +10°C to +30°C
Open time:	60 minutes
Adjustment time:	90 minutes
Initial setting:	9 hours
Final setting:	10 hours
Set to light foot traffic:	12-24 hours
Ready for use:	72 hours
FINAL PERFORMANCE DATA	
Temperature when in service:	from -40°C to +100°C
Resistance to moisture:	excellent
Resistance to ageing:	excellent
Resistance to solvents and oils:	good
Resistance to acids and alkalis:	good
Peel adhesion at 90° according to EN 1372 – after 14 days at +23°C (N/mm):	rubber: > 3 (floor-covering failure) PVC: > 3 (floor-covering failure)

WARNING

Although the technical details and recommendations contained in this product data sheet correspond to the best of our knowledge and experience, all the above information must, in every case, be taken as merely indicative and subject to confirmation after long-term practical application; for this reason, anyone who intends to use the product must ensure beforehand that it is suitable for the envisaged application. In every case, the user alone is fully responsible for any consequences deriving from the use of the product.

Please refer to the current version of the Technical Data Sheet, available from our website www.mapei.com

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