



# Adesilex G19

## Two-part epoxy-polyurethane adhesive for rubber, PVC and linoleum flooring



### WHERE TO USE

Interior and exterior use. Bonding of rubber, PVC, textile, needlepunch, and linoleum flooring, polystyrene and polyurethane panels, fibrous concrete, wood, sheet-metal, and plastic laminates.

### Some application examples

**Adesilex G19** is an extremely strong and flexible all-purpose adhesive especially recommended for non-absorbent or moisture-sensitive surfaces.

**Adesilex G19** is used for bonding:

- rubber flooring tiles or sheet (with smooth back, textured back, radial rubber tiles) in interiors and exteriors subject to heavy traffic;
- rubber flooring for athletic complexes, even on asphalt bases (e.g. tracks);
- synthetic grass;
- homogeneous or composite vinyl or PVC foam backed flooring;
- semiflexible vinyl flooring;
- textile, needlepunch, tufted and woven flooring for exterior installations;
- rubber and PVC floors over existing flooring;
- sandwich panels for prefabricated movable walls in polystyrene, expanded polyurethane, fibrous concrete, wood, composite board, metal sheeting, etc.;

- tack strip installation for stretching carpet

### OVER

cement screeds, asphalt and non-absorbent flexible or moisture-sensitive bases (metal sheets, plastic laminates, fibrous concrete, rubber, PVC, wood, existing ceramic tiles).

### TECHNICAL CHARACTERISTICS

**Adesilex G19** is a two-part adhesive composed of an epoxy-polyurethane polymer, part A, and a special hardener, part B.

Mixing the parts carefully forms a uniformly coloured paste that is easily applied with a notched trowel.

After hardening in approx. 24 hours solely through chemical reaction and without shrinkage, **Adesilex G19** becomes flexible, resistant to moisture, water, heat and atmospheric agents, with high bonding characteristics on almost all materials commonly used in construction.

### RECOMMENDATIONS

- Do not install on substrates subject to rising damp (always place a vapour-proof membrane between the ground and the screed).
- Do not install on damp concrete (residual moisture must be no higher than 3.0%).
- Do not install on fresh asphalt (wait at least 20 days).
- Do not install on bituminous surfaces which might bleed oils.



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- Do not use **Adesilex G19** at temperatures below +10°C or above +30°C.
- Do not use on curved surfaces or on stairs if the flooring is unable to maintain perfect contact with the substrate until the adhesive has set (use **Adesilex VZ**, **Adesilex LP** or **Ultrabond Aqua-Contact** applied to the back of the floor covering).
- Do not use **Adesilex G19** for thin flooring which may show adhesive ribs (use **Adesilex G20** self-levelling polyurethane adhesive).

## APPLICATION PROCEDURE

### Preparing the substrate

Substrates must be thoroughly dry, absorbent, level, resistant to compression and tensile stress, free from dust, loose particles, cracks, paint, wax, oil, rust, traces of gypsum and materials which may interfere with bonding.

The building regulations must be followed for the relevant country.

The moisture content must be as follows: for cement substrates, a maximum of 2-2.5%; for gypsum or anhydrite based substrates, a maximum of 0.5%.

It is essential to make sure there is no rising damp present.

Floating screeds over layers of insulation and screeds over bare ground must be isolated by a vapour barrier.

When repairing cracks and crazing, consolidating screeds, forming fast-drying screeds, or levelling uneven screeds is required, consult the MAPEI catalogue for substrate preparation products or the Technical Assistance Department.

External surfaces can be levelled with **Planicrete** mixed with suitably graded sand and cement or with **Adesilex P4**.

For exterior asphalt surfaces, use either **Adesilex G19** or **Adesilex G20**.

In special cases and for small imperfections in the substrate **Adesilex G19** can be used as a smoothing compound. Install the flooring with **Adesilex G19** as soon as the smoothing layer is set sufficiently to take light foot traffic.

### Acclimatisation

Before beginning the installation, ensure that the adhesive, the floor or wall covering and the substrate are acclimatised to the prescribed temperature.

The floor and wall covering must be removed from packaging several hours before installing; rolls must be freely laid or at least loosened to permit acclimatisation and reduction of tension produced by packaging.

### Mixing

The two parts of **Adesilex G19** are available in pre-measured proportions:

component A, 9.4 parts by weight;  
component B, 0.6 parts by weight.

Mixing must be carried out with a mechanical stirrer until a homogeneous paste is obtained. Setting time and pot life are closely related to the ambient temperature (see Table).

Do not use at temperatures below +10°C because setting time will be too long.

**N.B. The ratio of resin (part A) to catalyst (part B) is strictly determined. Any modification to the dosage will interfere with airing of the adhesive.**

### Spreading the adhesive

The choice of trowel depends on the back of the flooring to be installed: for smooth back use MAPEI trowels No. 1 and No. 2. For textured backings use trowels No. 3 or No. 4 (follow the flooring manufacturer's instructions).

Apply the adhesive evenly and on as much of the surface that can be covered with flooring in approximately 60 minutes, depending on the ambient temperature and that of the substrate.

### Installing the floor-covering

**Follow the installation instructions given by the floor covering manufacturer.**

Floor covering tiles or sheets must be applied onto the **Adesilex G19** while still fresh, within 1 hour at +23°C, and smoothed from the center outward to ensure complete contact and to remove entrapped air.

When the flooring is uneven, the deformed sections, joints and ends must be weighted down (with sandbags or other) until the **Adesilex G19** is set (12 to 24 hours).

Special care must be taken in exterior installations at high temperatures or extreme temperature differentials (install at the coolest time of day).

For thick flooring in sports complexes and synthetic grass, **Adesilex G19** can be used to bond sheets edge to edge.

Flooring bonded with **Adesilex G19** is sufficiently set to take light foot traffic in approx. 12 to 24 hours. Final setting takes place in approx. 3 days at an ambient temperature of +23°C.

The setting time of **Adesilex G19** at various temperatures is as follows:

Temperature in °C	30	25	20	15	10	5
Hours	4	6	8	1	20	36

### CONSUMPTION

Consumption varies, depending on the evenness of the substrate, the type of backing, and the trowel used:

with MAPEI 1 trowel: 400 to 500 g/m<sup>2</sup>;  
with MAPEI 2 trowel: 500 to 600 g/m<sup>2</sup>;  
with MAPEI 3 trowel: 600 to 800 g/m<sup>2</sup>;  
with MAPEI 4 trowel: 800 to 1000 g/m<sup>2</sup>.

### Cleaning

**Adesilex G19** can be cleaned from flooring, tools, hands and clothing with alcohol before the hardening reaction occurs. After hardening, it can only be removed mechanically or with **Pulicol**.

### Colours

**Adesilex G19** is available in beige, red, green, and black.

Special colours can be requested (min. 600 kg).



Spreading **Adesilex G19** with a notched trowel



Installing rubber flooring with **Adesilex G19**



Laying PVC on a non absorbent substrate with **Adesilex G19**

## TECHNICAL DATA (typical values)

### PRODUCT IDENTIFICATION

	component A	component B
<b>Consistency:</b>	thick paste	fluid liquid
<b>Colour:</b>	beige, red, green, black	
<b>Density (g/cm³):</b>	1.5	0.92
<b>Dry solids content (%):</b>	97	84
<b>Brookfield viscosity (mPa·s):</b>	300,000 (E rotor - 2.5 rpm)	30 (1 rotor - 5 rpm)
<b>Storage:</b>	<b>Adesilex G19</b> is stable for at least 24 months if containers are well sealed. The catalyst, Part B, must be kept in heated areas to prevent crystallisation at low temperatures, in which case it must be thawed before using.	
<b>Hazard classification according to EC 1999/45:</b>	irritant	corrosive, dangerous to the environment
	Before using refer to the "Safety instructions for preparation and application" paragraph and the information on the packing and Safety Data Sheet	
<b>Customs class:</b>	3506 99 00	

### APPLICATION DATA (at +23°C - 50% R.H.)

<b>Mixing ratio:</b>	component A : component B = 94 : 6
<b>Brookfield viscosity of mix (mPa·s):</b>	180,000 (7 rotor - 10 rpm)
<b>Density of mix (kg/cm³):</b>	1,450
<b>Pot life:</b>	50 to 60 minutes
<b>Application temperature range:</b>	+10°C to +30°C
<b>Open time:</b>	1 hour
<b>Adjustment time:</b>	90 minutes
<b>Initial setting:</b>	8 hours
<b>Final setting:</b>	9 hours
<b>Set to light foot traffic:</b>	after 12 to 24 hours
<b>Ready for use:</b>	after 3 days

### FINAL PERFORMANCE DATA

<b>Resistance to moisture:</b>	excellent
<b>Resistance to ageing:</b>	excellent
<b>Resistance to oils and to solvents:</b>	good
<b>Resistance to acids and to alkali:</b>	good
<b>Flexibility:</b>	yes
<b>Stripping strength at +90°C in compliance with EN 1372 standards after 14 days at +23°C (N/mm):</b>	rubber: > 3 (breaking point) PVC: > 3 (breaking point)



Installing PVC with Adesilex G19



Installation of synthetic grass flooring with Adesilex G19 - S.Siro Stadium - Milan - Italy

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All relevant references for the product are available upon request and from [www.mapei.com](http://www.mapei.com)



Track at Olympic Stadium in Rome: rubber installed with Adesilex G19



## PACKAGING

Adesilex G19 is available in 10 kg, 5 kg, and 2 kg units.

## STORAGE

Under normal conditions and in its original unopened packaging Adesilex G19 is stable for at least 24 months.

## SAFETY INSTRUCTIONS FOR PREPARATION AND APPLICATION

Adesilex G19 component A is irritant to the eyes and skin.

Adesilex G19 component B is corrosive and harmful if in contact with the skin or swallowed. Both components can provoke sensitivity in those who are susceptible to such a complaint if in contact with the skin. Use protective clothing, suitable gloves and protect eyes and face. In case of contact with eyes or skin, wash immediately with water. In case of swallowing or serious reactions consult a doctor. Use in well ventilated areas. Both components are dangerous to aquatic organisms; avoid release to the environment. For further information refer to the Safety Data Sheet.

PRODUCT FOR PROFESSIONAL USE.

## WARNING

*Although the technical details and recommendations contained in this report 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 applications; 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.*