

367/3.99

® EPOJET

SUPERFLUID EPOXY RESIN FOR INJECTION

WHERE TO USE

- Monolithic repair of structures with cracks or fissures caused by heavy loads, accidental impacts and earthquakes.
- Bonding and reinforcement of structures by low pressure injection.

Typical applications

- Structural repairs of beams, pillars and fissured floors by low pressure injection.
- Reinforcement of beams and floors by using injection and beton plaqué, the plated concrete technique, when the plates to be bonded are fitted with lateral flaps and it is therefore impossible to apply ADESILEX PG1 directly.
- Restoring and waterproofing cracks in reservoirs, tanks and canals.
- Restoring by injection various elements of façades, cladding and architectural details that are loose.
- Protective injections of post-compression cable ducts.
- Structural consolidation and restoration, by using injections, of civil and industrial road construction which show signs of cracking.



Mixing the 2 components of EPOJET

- Sealing of fissures in cementitious screeds.
- Consolidation and restoration, by injection, of concrete structures damaged by earthquakes, settlement or impact.

TECHNICAL CHARACTERISTICS

EPOJET is a two component solvent-free epoxy adhesive. The pre-measured portions (Component A = resin and Component B = hardener) must be mixed together before being used.

Once mixed, EPOJET becomes a liquid with low viscosity very suitable for injection.

EPOJET polymerizes without shrinkage and once hardened is waterproof.

EPOJET has very good insulating properties and high mechanical strength; furthermore it adheres perfectly to concrete and steel.

RECOMMENDATIONS

- Do not use EPOJET at temperatures below +5°C.
- Do not apply EPOJET to wet surfaces.
- Do not apply EPOJET on dusty, friable or weak substrates.
- Do not use EPOJET for sealing expansion joints.



DIRECTIONS FOR USE

Preparing the substrate

Beton plaqué/plated concrete

Before injecting EPOJET, the concrete substrate must be perfectly solid and clean. Remove all friable and detached sections and dust. All cement laitence and paint must be removed through sanding or wire brushing. Concrete that has been soaked with oil and grease must be completely removed. Clean all traces of rust from the reinforcements by sandblasting to bright metal or, if necessary, with emery paper and de-grease with solvents. Once these preparatory procedures have been completed, securely fix the steel plates to the concrete with expanding bolts. Position the injectors in the space between the structure and the plate reinforcements and seal with ADESILEX PG1, a two component thixotropic epoxy adhesive.

Sealing fissures through injection

Make a series of holes of approximately 8-9 mm in diameter along the fissure and blow out the cavities with compressed air to remove all the dust formed during the drilling. Insert into the holes the appropriate injection tubes and seal the entire working surface with ADESILEX PG1.

If the holes cannot be formed because of lack of space, fix flat head injection tubes directly onto the concrete with expanding bolts or seal with ADESILEX PG1.



Fixing injection tubes with ADESILEX PG1



Injecting EPOJET to a fissured pillar

TECHNICAL DATA

PRODUCT IDENTITY	Component A	Component B
Consistency:	liquid	liquid
Colour:	trans. yellow	trans. yellow
Specific gravity:	1.15 kg/lit	1.12 kg/lit
Brookfield viscosity (shaft 2 - revs. 5):	500 cPs	320 cPs
Storage Life:	1 year in original, unopened packaging at a temperature between +5°C and +30°C	
Health hazard according to EEC Law 88/379 and revisions:	yes EPOJET part A is irritating to eyes and skin, and a skin sensitizer. EPOJET B is caustic, harmful by inhalation and if swallowed, and also a skin sensitizer. Use always in a well vented area. Avoid any contact with the skin or eyes; always wear protective gloves and goggles while mixing the two components and during use. If the substances come into contact with the skin, wash thoroughly with soap and water, and should any sign of irritation occur consult a doctor immediately. Should the substance come into contact with the eyes rinse thoroughly with water and consult a doctor immediately. Use only in well ventilated areas.	
Inflammability:	no	
Customs Class:	3907 30 00	
APPLICATION DATA		
Mix Ratio:	Component A : Component B = 4:1	
Consistency:	Fluid liquid	
Specific gravity of paste:	1.1 kg/lit	
Brookfield viscosity (shaft 2 - revs. 5):	380 cPs	
Open time at +23°C:	40 min.	
Open time at +30°C:	20 min.	
Setting time at +23°C:	50 min.	
Setting time at +30°C:	30 min.	
Temperature range:	+5°C to +30°C	
Time required to harden completely:	7 days	
FINAL PERFORMANCES:		
Bonding to concrete:	≥ 3 N/mm ² (concrete breaking point)	
Bonding to iron for slippage:	15 N/mm ²	
Tensile strength:	50 N/mm ²	
Compressive strength:	100 N/mm ²	
Modulus of elasticity in compression at 7 days:	2,950 N/mm ²	
Modulus of elasticity in flexion at 7 days:	4,000 N/mm ²	
Tensile elongation:	1.2%	



Repairing beam with injection of EPOJET



Restoring horizontal structure by injection with EPOJET

Wait until the ADESILEX PG1 has hardened (minimum 12 hours) then starting from the base, carefully clean the injection system tube by tube with compressed air, paying close attention that the system is completely free.

Preparing the product

First the two components of EPOJET must be mixed together. Pour Component B into Component A and mix by hand

using a spatula for small amounts, or with a low speed heavy duty drill for large quantities, avoiding the formation of air bubbles, until the mix is perfectly homogeneous. Do not use partial quantities of the components as this may produce an imbalance in the proportions which could lead to incomplete hardening of the EPOJET.

Applying the product

Begin immediately from the lowest tube and start injecting the EPOJET until the resin overflows out of the next tube.

Close the lower tube and continue injecting until the entire fissure is completely sealed.

Horizontal fissures can be sealed, simply by pouring EPOJET directly into the crack.

At +23°C EPOJET must be used within 40 minutes of its preparation. Avoid using EPOJET when the temperature of the substrate is less than +5°C.

Precautions to be followed during preparation and application

EPOJET may cause irritation of the skin. The use of protective gloves and goggles is recommended during preparation and application.

When the product is being applied in closed or poorly ventilated areas provide sufficient forced ventilation.

Should the substance come into contact with the eyes rinse thoroughly with water and consult a doctor.

Cleaning

The tools used for the preparation and injection of EPOJET must be cleaned with a solvent (ethyl alcohol, xylene, toluene, etc.) immediately after use.

COVERAGE

Sealing of fissures: 1.1 kg per litre of cavity.

Bonding of concrete-steel: 1.1 kg per m² per mm of thickness.

PACKAGING

2.5 and 5 kg units.

STORAGE

Store in a covered, dry area at a temperature between +5°C and +30°C.



WARNING

Although the technical details and recommendations contained in this product 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.

N.B. FOR PROFESSIONAL USE ONLY



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