



TECHNICAL DATA SHEET (TDS)

epoGRANIT 2003 - EPOXY ADHESIVE

(Non Yellowing)

1. PROPERTIES

epoGRANIT 2003 is a gel form, transparent, **UV resistant, non yellowing**, moisture tolerant, structural adhesive with 2:1 mixing ratio, hardening in 45 min. It can be used when a precise and sensitive adhesion surface is needed (>1mm). It features high bonding strength and bearing capacity. Cured Epo Granit 2003 is a stone like yet elastic, chemically inert, high strength, solid and does not change on aging. The hardened product is stress free and retains strength and elasticity over a range of temperatures from above 90°C to as low as -30°C without softening or embitterment.

- **UV resistant, non yellowing**
- Smooth and easily workable, simple 1:1 mixing ratio
- Non - sag on vertical or overhead surface,
- sets in 30minutes at 25°C
- 90% cure within 1 hour at 25°C
- Very high strength permanent bonds
- Tensile and compressive strength superior to concrete
- Excellent chemical resistance
- Can be machined after 45 minutes cure at 25°C .

2. APPLICATION AREAS

CIVIL ENGINEERING APPLICATIONS

Epo Granit 2003 is specially formulated non-sag epoxy filling paste and adhesive. This easy to use two-part epoxy product sets after mixing with excellent properties ideally suited for;

BONDING FILLING AND REPAIR

Pre-cast concrete articles, fiberglass articles, grouting bolts, concrete floors and stairs, natural stones, concrete columns, bricks and ceramics, institute formed concrete metal

APPLICATION FOR MARBLE, GRANITE, PORCELAIN AND OTHER STONES

Epo Granit 2003 is mainly applied in the stone processing industry for bonding natural stones (marble, granite) and cast stones, **sintered porcelain** or building material (terrazzo, concrete). In addition other materials. Plastics (rigid PVC, polyester, polystyrene, ABS, polycarbonate), paper, wood.

Due to its gelly-like, smooth consistency the product has a good vertical stability, yet, also thin joints can be reached. Epo Granit 2003 does not stain or dehydrate even the most sensitive types of marble. Epo Granit 2003 strengthens and improves durability of intricately weak types of stones by sealing the cracks and faults, which could otherwise cause problems during and after installation.



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3. INSTRUCTIONS FOR USE

1. NATURAL STONE Surfaces to be bonded must be clean and slightly roughen mix 2 parts (volume or weight) of component A with 1 part (volume or weight) of component B until a homogeneous shade of color is achieved.
2. ELKAY Coloring Pastes can be added up to max. 5 %. The mixture remains workable for approx. 45-55 min the hardening process is accelerated by heat and delayed by cold.
3. Attention! Metallic surfaces should be ground in a short interval before bonding to avoid a decrease in adhesion.
4. Ensure the right mixing ratio, in case optimal mechanical and chemical properties can be obtained.
5. A surplus of adhesive or hardener has the effect of a softener.
6. Two separate spatulas should be used for the hardener and the adhesive.
7. An adhesive which is already thickened or just gelling should not be used anymore.
8. At temperatures below 10°C the product should not be used any more as there is no sufficient hardening.

4. TOOLS REQUIRED FOR APPLICATION

Spatula for mixing and applying

5. PACKAGING

PRODUCT CODE	VOLUME	PACKAGE
Can	1 Kg (A + B)	12
Can	2,250 Kg (A + B)	12
Metal Bucket	15 Kg (A + B)	4

6. STORAGE AND SHELF LIFE

Store in airtight original containers at temperatures not below 10°C. If stored properly, shelf life is 2 years.

7. CAUTION

- Keep the container tightly closed during the application.
- Apply the resin on a dry and clean surface.

8. SAFETY MEASURES

- Irritating to eyes and skin. Avoid contacting eyes



- Do not inhale.
- If eyes contact occurs, immediately flush eyes with plenty of water and consult a doctor.
- Use only in well-ventilated areas.

9. TECHNICAL DATA

Consistency	: Gel
Color	: Yellowish Transparent
Mix Ratio by volume	: 2:1
Loading Time at 25°C	:120 minutes
Pot life at 25°C	: 45 minutes
Full cure at 25°C	: 24 hours
Tensile shear strength	: > 20 Mpas
Elastic deformation at 20 Mpas shear stress	: 2.5%
Tensile bond strength	: 10 Mpas
Compressive strength	: 80 Mpas
Flexural strength	: 15 Mpas
Coefficient of linear expansion	: 40 mm per °C 10-6