Quality System Certified Company
UNI EN ISO 9001:2015

TECHNICAL DATA SHEET
PRODUCT

EPOXY G116-24 Resin Block

EPOXY ADHESIVE, BICOMPONENT, STRUCTURAL
for building materials, bricks, ceramics, natural stone, wood

Bi-component epoxy adhesive, specially formulated for application on rigid and porous materials, for stable and permanent bonding.
It consists of epoxy resins reinforced by mineral fillers and catalyzed by amine hardeners.
The hardened system, maintains good elasticity characteristics that allow adhesion also of different kinds of supports (stone-metal, ceramic-wood, ceramic-metal, etc.)

FIELD OF USE

Permanent bonding of buil**ding materials, cement, marble, granite, natural stone, ceramic products, wood, metals, fiberglass** between them or with other supports.
Can be used for the consolidation of blocks of granite, marble and natural stone before the sawing operation using a fibreglass mat of high grammage as reinforcement.

CHARACTERISTICS

- Very good adhesion
- Resistant to atmospheric agents, acid rains
- Resistant to solvents, to basic (suitable therefore on cement) and acids environments
- Almost nil shrinkage
- Practically odourless
- Can also be used for the application of fibreglass for reinforcing the materials.

WARNING

- *Avoid use at temperatures below 10°C / 50°F*
- *Does not adhere to silicon*
- *Does not adhere to polyethylene*

HOW TU USE

PREPARING THE SURFACE. Thoroughly clean the surfaces eliminating all traces of dust and loose parts, traces of cement, gypsum, grease, etc. Better adhesion if the substrate is slightly roughened.

PREPARING THE MIXTURE. By using mechanical equipments, mix carefully component A and component B exactly in the ratios indicated A: B = 100: 25 until the mixture is completely homogeneous.

APPLICAZIONE. Apply the mixed product on the clean and dry substrate with a knife/spatula. After 12 to 15 hours it is possible to move the glued piece and after 24 to 48 hours (according to environmental conditions, temperature, humidity, etc.) it is possible to proceed with the subsequent processing.

IMPORTANT

- *Do not use the A + B mixture already in the gelling phase*
- *Never put the unused mixture A+B back into the can*
- *Store at temperatures between +10°C and +30°C / +50°F and 86°F*
- *Curing becomes faster at high temperatures and slower at low temperatures*

MIXING RATIO in weight

Component **A** : Component **B** = **100 : 25**

STABILITY

The product, when kept in its original, sealed, intact packaging and stored in a dry place at a temperature between 15°C and 25°C / 59°F and 77°F , has a stability of at least 12 months. Protect from frost.

PACKAGING

set A+B of total 25,00 kg. (20 kg. component A + 5 kg. component B separately packed)

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TECHNICAL DATA

	component A (resin)	component B (catalyst)
Physical state	Soft paste	Semisolid paste
Color	White	Light Yellow
Odoour	characteristic (slight)	characteristic (slight)
Density at 20°C / 68°F	1,30 ± 0,05 g/cm³	1,20 ± 0,05 g/cm³
Toxicity	irritant	corrosive
Flammability	no	no
Catalysis ratio		A : B = 100 : 25
Appearance of the mixture		Soft paste
Time of workability (A=200 g. + B=50 g.)		40 - 50 minutes at 25°C/77°F
Time of reactivity in a thin layer (superficial hardening)		6 to 7 hours (at 25°C/77°F) 2 ½ - 3 ½ ore (at 40°C/104°F)
Parts handling time (after application at room temp. of 25°C/77°F)		> 12 ore
Time of complete polymerization		4 to 7 days

DATI RIFERITI ALLA MISCELA A+B

CHENICAL RESISTANCE (specimens hardened 10 days at room temperature)

(variations % in weight after 21 days of immersion at 25°C/77°F)

	%	note
DISTILLED WATER	1,2	withstands
SODIUM HYDROXIDE 10%	0,9	withstands
ACETIC ACID 10%	3,3	not withstanding
HYDROCHLORIC ACID	1,2	withstands
SODIUM HYPOCHLORITE	1,2	withstands
XYLENE	0,8	withstands
PETROL	0,4	withstands
BUTYL ACETATE	4,9	not withstanding
DIESEL	1,0	withstands

Epoxy mastics have excellent resistance to the action of chemical agents such as oils, petrol, diesel, many acids and bases. Resistance to organic solvents must be evaluated on a case-by-case basis.
Better characteristics are obtained with post-hardening at temperatures of 60°C - 80°C / 140°F - 176°F

MECHANICAL CHARACTERISTICS (referred to the resin hardened with amine)***

	value	test method
HIGH DISTORSION TEMPERARTURE (HDT)	55°C-60°C / 131°F-140°F	ASTM D 3418
THERMAL DISTORTION after post-hardening at 80°C / 176°F	90°C-95°C / 194°F-203°F	ASTM D 3418
FLEXURAL STRENGTH (breaking point)	90 - 110 MPa	ASTM D 790
FLEXURAL ELASTIC MODULUS	3300 MPa	ASTM D 790
COMPRESSION STRENGTH	85 - 90 MPa	ASTM D 790
TENSILE STRANGTH	45 - 85 MPa	ASTM D 790
ELONGATION AT BREAK	1 - 1,5%	ASTM D 638
HARDNESS Shore D/15	60 - 85	ASTM D 2240

*** Data referred to pure resin

THICKNESS

The best adhesive characteristics are obtained with adhesive thicknesses from 0.6 to 1.0 mm.

TEST

Always carry out preliminary tests to check the correct use of the product and especially in the case of new non-expert applicators or in the case of new types of materials.

LIMITI DI LIMITS OF LIABILITY The information provided derives from bibliography or from our. laboratory experiences and must be understood as general indications and do not represent a formal guarantee. In particular, the liability for defective products, once the defect has been ascertained, is in any case limited to the refund of the purchase price of the product. We do not assume any responsibility for implicit or explicit damages due to the use of the product that remains outside of our direct control

ALWAYS EFFECT A PRELIMINARY TEST BEFORE THE APPLICATION

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