

TECHNICAL DATA SHEET (TDS)

MASTIC EPOX 2000

ID Product Code 019



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TWO COMPONENT EPOXY MASTIC

Mastic for marble, granite, stones and building.

Product description:

Two components epoxy mastic, suitable for bonding, glue jointing and filling of various types of granites, marbles and stones, even very hard and crystalline ones, where the adhesion of polyester-based adhesives is sometimes insufficient. Superior adhesion, EPOX 2000 allows to fill and also correct large imperfections of valuable artifacts that otherwise would be considered waste. It is inalterable to the weather and has high resistance to solvents, alkalis, acids, and also to sea water. It has virtually no shrinkage, this quality allows to make big reparation or restoration in a single application, without VOC. Ideal for vertical bonding. Bi-component epoxy adhesive, liquid and tixotropic version, solvent-free with catalyst based on poorly yellowing cyclo-aliphatic amines. EPOX 2000 is the ideal product for stone processing, for bonding and grouting of natural stone (marble, granite), as well as conglomerates or building material (terrazzo, concrete). Resistant to weathering, it is particularly suitable for vertical grouting. The liquid version is suitable for grouting cracks of granite or hard floors before polishing. It can also be used as filler for sealing cracks, holes or imperfections.

Chemical characteristics:

SOLID for VERTICAL		LIQUID for FILLING	
Appearance	Tixotropic Paste	Appearance	Flowing
Color	See color chart	Color	See color chart
Odor	Characteristic	Odor	Characteristic
Specific gravity at 20° C (68° F)		Specific gravity at 20° C (68° F)	
Part A - Resin	1,13 ± 0,01	Part A - Resin	1,15 ± 0,01
Part B - Hardener	1,10 ± 0,01	Part B - Hardener	1,05 ± 0,01
Hydro-solubility	Not soluble	Hydro-solubility	Not soluble
pH	N.D.	pH	N.D.
Viscosity of mixture A+B at 25°C (77°F)	3200 cPs	Viscosity of mixture A+B at 25°C (77°F)	1400 cPs
Catalysis ratio	2:1	Catalysis ratio	2:1
Hardness after 24 hours	78-80 Shore D on 5 mm/0,2 in thickness	Hardness after 24 hours	78-80 Shore D on 5 mm/0,2 in thickness
Adhesion on natural stone	Cohesive breaking of stone: 4 - 7 MPa.	Adhesion on natural stone	Cohesive breaking of stone: 4 - 7 MPa.
Three-points flexure (EN ISO 178)	Stress at break: 80 MPa Module: 1620 MPa	Three-points flexure (EN ISO 178)	Stress at break: 66 MPa Module: 1740 MPa
Traction (EN ISO 527-1)	Stress at break: 56 MPa	Traction (EN ISO 527-1)	Stress at break: 42 MPa
UV Resistance (UV Lamp Spectronics ENF-260C/FE):		UV Resistance (UV Lamp Spectronics ENF-260C/FE):	
Long wave 365 nm	Good (no variation after 24 hours exposure)	Long wave 365 nm	Good (no variation after 24 hours exposure)
Short wave 254 nm	Good (no variation after 24 hours exposure)	Short wave 254 nm	Good (no variation after 24 hours exposure)
Resistance to chemicals:	Solution of common salt at 10% Sea water Ammonia at 10%	Resistance to chemicals:	Solution of common salt at 10% Sea water Ammonia at 10%



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Sodium hydroxide at 10%	Sodium hydroxide at 10%
Hydrochloric acid at 10%	Hydrochloric acid at 10%
Hydrocarbons	Hydrocarbons
Storage at 20 ° C away from heat, moisture, sunlight 24 months in original packaging	

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POT LIFE OF MIX

SOLID for VERTICAL		LIQUID for FILLING	
Pot life of Catalyzed product	60-70 min at +10°C (50°F)	Pot life of Catalyzed product	60-70 min a +10°C (50°F)
100 g (3,5 oz.) Part A	20-30 min at +20°C (68°F)	100 g (3,5 oz.) Part A	20-30 min a +20°C (68°F)
+ 50 g (1,8 oz.) Part B	15-20 min at +30°C (86°F)	+ 50 g (1,8 oz.) Part B	15-20 min a +30°C (86°F)
	5-10 min at +40°C (104°F)		
Pot life at 20°C/68°F for	20g (0,7 oz) A + 10g (0,35 oz) B = 35-40 min	Pot life at 20°C/68°F for	20g (0,7 oz) A + 10g (0,35 oz) B = 35-40 min
different quantities	50g (1,8 oz) A + 25g (0,88 oz) B = 25-30 min	different quantities	50g (1,8 oz) A + 25g (0,88 oz) B = 25-30 min
	100g (3,5 oz) A + 50g (1,8 oz) B = 20-25 min		100g (3,5 oz) A + 50g (1,8 oz) B = 20-25 min
	300g (10,6 oz) A + 150g (5,3 oz) B = 12-18 min		300g (10,6 oz) A + 150g (5,3 oz) B = 12-18 min

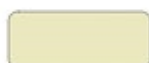
(*)indicative values relating to the hardened resin object of laboratory tests

Colors available

The colors refer to 'EPOX SOLID 2000 only. Liquid version is available in Transparent only.



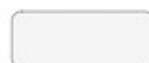
WHITE



BEIGE (STRAW YELLOW)



BLACK



TRANSPARENT

The colors represented on this sheet are approximate and differ from the originals being a digital image.

Instruction for use

The parts to be bonded or filled must be clean, completely dry and free of dust; if possible, roughen them slightly.

Mix thoroughly the two dosed components, in the ratio (by weight) of 2 : 1 (A : B), using small quantities of product in order to avoid waste from too fast curing (mass effect). For a good job, usually 250-300 grams (8-11 oz per mixing) at a time are sufficient per single catalysis.

Pot-life (20-30 minutes a 20°C/68°F) will be longer at lower temperature and shorter at higher one; moisture can change reaction time, so it's better to avoid high humidity. Finishing (smoothing) can be run after 6-7 hours (at 20°C/68°F) from jointing, after 14-16 hours (at 20°C/68°F) can be sanded. Complete polymerisation will be after 7 days from applications. Do not apply at temperatures below 10°C/50°F.

Highlights

- Reduced tendency to yellowing
- Transparent Clear
- Extremely low shrinkage
- Weatherproof gluing
- Excellent resistance to alkalis, therefore suitable for bonding with concrete
- Suitable for bonding material impermeable to gas, because product is free of solvents
- Excellent resin layering elements to create "sandwich" elements
- Suitable for bonding solvent sensitive materials



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- No emission of V.O.C. (Volatile Organic Compounds) in accordance with European standards.

Suggestion for use and recommendations:

- Avoid to use the mastic at temperature below 10°C (50°F) because drying process could not be complete.
- Epoxy resins are sensible to humidity because could change reaction times, it is advised not to apply the product in situation of high humidity.
- Never catalyze the total quantity of the mastic at one time in order to avoid “mass effect” because the mastic will dry quickly.
- Do not use hardener in different ratio than indicated on the tin or in the present bulletin; it will prejudice catalysis time and could never dry, or change the color of catalyzed product.
- Do not use the coloring paste in quantity more than 5% as it could prejudice the adhesion.
- Part A and Part B should be taken only with different paddles/spatulas.
- Adhesive already thickened or in gel phase could no longer be worked.
- Tools can be cleaned with nitro solvent.
- Keep lid well closed and store product in a cool and ventilated place
- Avoid contaminating part A with part B.
- Before use read the recommendations printed on the label and always carry out a preliminary test.

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Application surfaces

Granite, marbles, agglomerated and engineered stones, terrazzo and stones, concrete elements, bonding of different materials between them.

Safety procedures

As far as the proper working procedures is concerned, we recommend to consult Material Safety Data Sheets issued according to E.U. rules and to follow your national laws concerning safety in the working place. MSDS is available on our web site www.bellinzoni.com

Packing

TYPE	Item N°	Part	Packing	Pieces for cardboard
TRANSP. FLOWING	019METRLA001	Part A	Kg 1 (35,2 oz.)	6
TRANSP. FLOWING	019METRLB0005	Part B	gr. 500 (17,6 oz.)	6
TRANSP. SOLID	019METRVA001	Part A	Kg 1 (35,2 oz.)	6
TRANSP. SOLID	019METRVB0005	Part B	gr. 500 (17,6 oz.)	6
COLORED SOLID	019ME__VA001	Part A	Kg 1,50 (52,8 oz.)	6
COLORED SOLID	019ME__VB0005	Part B	gr. 750 (26,5 oz.)	6

The tins are in Steel (ACC) after use will have to be recycled according to the regulations on waste disposal. The packages are approved under U.N. directives rules for inland transport (ADR) and by sea (IMO) for transportation via air refer to local regulations (IATA). For further information regarding transport please check MSDS.

Trademark and Origin of the good

BELLINZONI® is a registered trademark of Bellinzoni company. The law considers a trademark to be a form of property and any misuse can be persecuted by law. Bellinzoni s.r.l. declares that our product EPOX 2000 is MADE IN ITALY.



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