ITA 400

1. description

Unfilled, solvent-free, two-component epoxy-based system for either room temperature or oven hardening.
The final characteristics of the hardened product can be altered as desired (by varying the mixing ratio from a rigid product (with ratio A:B = 100:40) to a flexible product (with a ratio of up to A:B = 100:100).
For the setting and composition of stones, the optimal mixing ratio is A:B = 100:50.
The hardened mass has a glass-like appearance.
Due to the long hardening time, thick castings are possible (with layers as thick to 3 cm).

2. composition

Component A: modified liquid epoxy resin.
Component B: modified polyamine-based curing agent.

3. applications

Decorative encapsulations and coatings.

4. Packaging

A: tanks/metal drums/cans	**kg 1.000/200/25**
B: tanks/plastic drums/cans	**kg 1.000/200/25**

N.B – Other kind of packaging are available on demand.
The components must be dosed according to the indicated mix ratio.

5. Mixing

Mix carefully by suitable equipment until finished homogenisation.
In case of automatic dosing pumps, it's necessary to verify daily that the ratio has been kept.

6. Mix ratios

A = 100
B = 40 -100 (weight)
AVOID VARIATIONS BETWEEN THESE RATIOS.

7. Hardening temperature

From 15°C .
At lower temperatures and at humidity high values the polymerisation of the product doesn't occur in the ideal way.

8. Storage

The product, stored in sealed original containers in normal conditions between 15÷35 °C, away from source of heat, humidity and sun light, is useable for 12 months since production date.
The components can crystallize at temperatures lower than 10°C; in this case, before using material, warm it up in an oven or by bain-marie at 75-85 °C until it becomes completely soluble.
Subsequently, let it cool at room temperature.
The hardening agent is very sensitive to humidity. Avoid prolonged contact with air.

9. Tool cleaning

Clean tools with acetone or with denatured alcohol.

10 . Diluition

Do not dilute the product with any solvent, water or diluent.
The addition of other coloring paste or of any other additives modifies the product properties, therefore the use, if not prevented athourized, is not recommended.

11. Surfaces preparation

All Surfaces to be treated must be free of dust, grease, oil, cleaned and dry. So before applying the product clean the surfaces.
The temperature of both components, resin and hardener, during the mixing and the application, must not be absolutely lower than 15°÷ 20°C.
It's always better to heat at 35-40°C the slabs on which the product will be applied .
Once the resination has been carried out, it 's necessary to do a curing cycle in an oven, for example at 4 ÷ 6 hours at 45÷50°C.
In case of use of an automatic equipment with a dispenser , it' s necessary to check daily that the ratio in weight of the components has been kept.
_ Caution: It's recommended to do preliminary tests in order to verify if the product is suitable for the expected purpose.

12. properties

ITA 400 component A

Features	*Norm*	*Unit*	*Value*
Density at 23 ± 2°C	ASTM D 1475/98	g/ml	1,13 ± 0,02
Viscosity at 23 ± 2°C	ASTM D 1824/95	mPa·s	700 ÷ 900
Appearance	-	visual	transparent liquid
Colour	-	visual	Slightly pale blue

140 H component B

Characteristic	*Standard*	*Unit*	*Value*
Specific weight at 23 ± 2°C	ASTM D 1475/98	g/cm^3	0,98 ± 0,02
Viscosity at 23 ± 2°C	ASTM D 1824/95	mPa·s	60 ÷ 80
Appearance	-	visual	liquid
Colour	-	visual	Colourless /pale yellow

mixture of components

Characteristic	*Standard*	*Unit*	*Value*
Colour	-	-	Colourless
Gel time at 23 ±2°C (300 gr A+B, ratio: 100:40)	DIN 16945	hours	approx. 24
Gel time at 23 ±2°C (300 gr A+B, ratio: 100:100)	DIN 16945	hours	approx. 30
Gel time at 60 ±2°C (1-2 mm thickness, A+B, ratio: 100:50)	Mi IS18*	minutes	130 ÷ 150
Gel time at 100 ±2°C (1-2 mm thickness, A+B, ratio: 100:50)	Mi IS18*	minutes	15 ÷ 18
Mixture viscosity at 23 ±2°C (ratio: 100:40)	ASTM D 1824/95	mPa s	500 ÷ 600
Mixture viscosity at 23 ±2°C (ratio: 100:100)	ASTM D 1824/95	mPa s	300 ÷ 400

**internal analytical method (available upon request).*

13. Hygiene

When processing resins and hardeners all hygiene and safety regulations must be strictly observed.
Protective clothing, gloves, goggles and respirators are recommended for one's safety.
For disposing of the waste, applicable legislation must be complied with. Do not empty into sewerage.
For more detailed information, refer to the corresponding safety data sheet.

This version deletes and replaces all previous versions
All the information herein is provided to the best of our knowledge.
The product mentioned are for professional use only: the indication of use supplied by the manufacturer does not release the buyer/user from testing the product and checking that the results actually obtained comply with those required.

Furthermore, the manufacturer accepts no liability, direct or indirect, deriving from or in any case related to the incorrect and/or improper use of the products and/or in any case deriving from the use of the products in conflict with the technical specifications described in the technical data sheets.