

TECHNICAL DATA SHEET

Date of issue: 05/09/2011

Last updating:n°1 05/06/2013



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Name:	EPOXY INSULATOR	Category:	Binding primers
Definition:	Consolidating epoxy primer	V.O.C. limit:	750 g/l
Code:	29.1.00001	V.O.C. ready to use:	745 g/l
Product according to 2004/42/CE			

NATURE OF THE PRODUCT

Two component epoxy-polyamidic primer to be mixed before use.

GENERAL USES

First coat for impregnation of concrete supports, it has also a consolidating effect and gives a good anti-dust property to the surface. Two coats application gives also a good anti-oil and waterproofing effect. It promotes adhesion on zinc plated and aluminium surfaces.

APPLICATION METHOD

PREPARATION OF SURFACES

This means that presence of grease and oils on the surfaces, is absolutely not allowed.

The cleaning of the application surface should be total and painstaking and it is a fundamental and necessary condition to obtain positive result of the painting cycle.

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- Ferrous surfaces. SA2 1/2 sandblasting or very careful mechanical abrasion followed by degreasing using thinners, then proceed with the direct application of the product.
 - Galvanized sheet. Delicate sanding (with scotch brite paper) followed by degreasing using thinners. Then proceed with the direct application of the product or, if preferred with the application of a primer and then the top coat.
 - Aluminium: chromate or phosphorous chromate treatment or in alternative sanding procedure followed by degreasing using thinners. Then proceed with the direct application of the product.
 - Concrete: the surface has to be perfectly cleaned, dried, with an humidity rate inferior to 4%, aged (at least 4 weeks), without any trace of oil and/or anti-adhesion products and has not to shows any rising damp. P
- I. Clean with acid washing process the concrete, then rinse with a pressure washer machine and aspirate the washing water.
 - II. Let the concrete dry (2-7 days depending humidity and temperature of the ambient).
 - III. On dry surface apply one coat of the epoxy primer 29.1.00001 catalyzed 1:1 with 02.001 and diluted 50% with epoxy thinner 07.006.
 - IV. After 2-4 hours apply a second coat of the same product, but diluted only 20-30%.
 - V. If you can consider that the concrete is impregnated enough, saturater in its porosity you can go on with the application of the topcoat, 25.2 for instance, in the required color. In alternative you can apply a third coat of 29.1.00001 to obtain a transparent glossy final effect.
 - VI. The topcoat has to be applied within 12-24 hours (depending always on the ambient temperature) from the last coat of 29.1.00001. Over 12-24 hours a light scratching is necessary before overcoat the primer.
 - VII. The topcoat series 25.2 has to be catalyzed 15% with 02.031 and diluted maximum 5% with epoxy thinner 07.006, normally you apply 2 consecutive coat by roller with 3-8 hours between each other. Over 24-48 hours between the 2 coats, a light scratching is necessary before proceeding with the second coat.
- **Attention**, 25.2 has to be applied within 20 minutes from the mixing of the 2 components, otherwise the exothermic reaction of the system will make rise up the temperature to a level that will make cure the product inside the can.

PREPARATION OF THE PRODUCT

Code	name	By weight	By volume
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Component A	29.1.00001	Consolidating epoxy primer	100 parts	100 parts
Component B	02.001	Eporex for epoxy primer	100 parts	100 parts

Carefully mix until an even colour and consistency are obtained. Dilute form 30% to a maximum of 100% with our epoxy thinner 07.006, depending on the absorbing level of the surface. For concrete supports a single coat with the dilutions suggested works like consolidating and anti-dust effect. To obtain a surface more glossy and easy to be clean, overcoat with a second coat not diluted within 24 hours.

APPLICATION¹

Spray gun: nozzles of 1,4-1,6 mm. diameter and 3-5 atm. pressure.

Airless. nozzle 0,09 inches, 120-150 bar

Brush/roller

TECHNICAL DATA

PRODUCT TYPE: Two pack product

APPEARANCE (ASTM D 523): Glossy (83±5 gloss).

COLOURS: Transparent (using a maximum of 5% of tinters from Siro solventbased tintometric system you can give a light coloration to the system that will become coloured but always in transparency)

SPECIFIC WEIGHT (ISO 2811): A + B 0,91 kg/l (± 0,04).

SUPPLY VISCOSITY(DIN 53211): 70" Ford 4 a 25°C. (± 7").
:

SOLID ON VOLUME: A + B 28% (± 2%)

SOLIDS CONTENT: A + B 27% (± 2%)

DRYING AT 20°C	- Dust dry:	30'-2 hours	- Touch dry:	4-8 hours
	- Total hardening :	24 hours	- Forced drying ²	30' at 60°C

- Maximum chemical resistance: After 7 days

RECOMMENDED COATS:

One or two

THICKNESS³: 20-30µm

¹ An high humidity rate during application can lead to the formation of a matt layer on the surface of the paint and also lower the curing time of the system. Minimum temperature suggested for the application + 10° C.

² Baking the product can produce the popping effect, to avoid this is better a flash-off time of 30'-60' before put the paint to dry in the oven

³ Considering a dry film.

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THEORETIC YIELD⁴: 12 m²/kg

IMPACT TEST 36 kg direct, 10 kg reverse, on scratched iron
(ASTM D 2794):

ADHESION (ASTM D 3359): B=5 on surfaces treated like above reported

CHEM. RESIST.⁵ (UNI EN ISO 12720):

Hydrochloric acid-HCl	solut. 10%	vote	5	7 days
Nitric acid-HNO ₃	solut. 10%	vote	2	3 days
Sulphuric acid-H ₂ SO ₄	solut. 10%	vote	5	7 days
Acetic acid	solut. 10%	vote	1	3 days
Ammonia	solut. 30%	vote	4	7 days
Sodium hydroxide	solut. 10%	vote	5	7 days
Acetone		vote	4	24 hours
Cyclohexanone		vote	5	24 hours
Solvello 100		vote	5	24 hours
Ethyl acetate		vote	3	24 hours
Ethanol		vote	5	24 hours
Engine oil 15W40		vote	5	7 days
Red wine		vote	3	24 hours
Oliv oil		vote	5	24 hours

REPAINTING: After minimum 4 hours, maximum 24 hours. Over 24 hours slight scratching is recommended before overcoat.

STORAGE STABILITY: Two year, stored in closed packs, in a cool, dry place, away from any sources of heat.

⁴ The theoretical yield has been calculated for the thickness suggested and over plane and regular surfaces.

⁵ The quality of chemical resistance goes from a value of 5 (means optimum) to 1 (means not good). For further information please contact Siro's technical service.