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| GIORGIO GRAESAN and Friends | TECHNICAL SHEET | Code | TDS1029_00 |
| | IPER VETRO | Revision | 01 |
| | | Date | 16/11/2018 |

1. DESCRIPTION

Two-pack, thixotropic, clear epoxy resin makes surfaces glossy and visibly uniform, resistant to water and normal chemical agents.

2. USE

Specially formulated for application with KIT/NUDO steel trowel on interior walls of bathrooms, kitchens or other settings that require high protection.

Ideal for interiors of shower stalls or other settings in direct contact with water.

3. PREPARING THE SUBSTRATE

Do not apply IPER VETRO directly on a lime-based product. Application processes allowed:

- ISTINTO + GIOIA diluted 30% (at least 2 coats), then apply IPER VETRO
- ISTINTO + VETRO diluted (20% VETRO + 80% water in 2 coats), then apply IPER VETRO

The substrate must be **thoroughly dry**, clean and not chalking (at least 48 hours after the application of ISTINTO and 24 hours after the application of GIOIA or VETRO).

For old walls already done with ISTINTO and protected with GIOIA or VETRO, clean and degrease the surface well, then proceed with IPER VETRO.

4. PREPARING THE MIXTURE

Catalyse BASE A with HARDENER B.

Pour HARDENER B into BASE A, mix thoroughly and slowly by hand, avoiding incorporating air into the material. Scrape the sides of the pot so the material flows inwards. Mixing time should not exceed 2-3 minutes. Allow the mixture to rest for 10 minutes, but not beyond. If the product is allowed to stand during the reaction between the two components, it noticeably heats up and its workability is compromised.

Application should be done immediately afterwards and within 30 – 40 minutes at 20°C; on especially hot days, prepare less product and proceed with the application. After 40 minutes, the product begins to thicken and make bubbles; this is a sign that it should be replaced.

5. METHOD OF APPLICATION

Apply with KIT/NUDO stainless steel trowel, pulling it smoothly upwards, following the grain of the surface so that the gel stays within the cracks. Always work with a little product on the trowel, this lets it flow better. Avoid leaving too much product in the grain; if the product forms drips, immediately remove the excess.

On corners or other spots hard to reach with the trowel, wipe with rubber finger.

Within 18-24 hours the product is still soft and it is possible to do spot touch ups, though avoid overlaps.

Between the first and second coat, wait 24 hours at 20° or until the first coat is "tack free", i.e. no print is left when pressure is applied with a finger. After 36 hours, the product vitrifies; therefore, before proceeding with the second coat, we recommend lightly sanding with thin sandpaper, removing the dust.

Keep the area isolated from dust for at least 12 hours.

Once done, seal the edges in contact with other surfaces (shower trays, taps, kitchen countertops) with suitable silicone, to avoid water stagnating between IPER VETRO and the wall, which would result in the formation of rings or crazing.

If you want to get a matt effect, when the second coat of IPER VETRO is completely dry (at least 48 hours) apply VETRO OPACO with a brush or roller.

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6. RECOATING

Should it be necessary to apply a decorative product over IPER VETRO, provided that 7 days have elapsed from its application, proceed first with a coat of PRIMUS AGGRAPPANTE, applied with the KIT/I trowel, then apply the desired lime finish. For products that require a smooth surface, apply a smoothing filler and an insulating primer to PRIMUS AGGRAPPANTE, then proceed with the standard cycle provided.

7. CLEANING THE TOOLS

To clean IPER VETRO residue from tools and coated surfaces, use ethanol on fresh product. Once hardened, the product may only be removed mechanically.

8. CLEANING THE FINISHED SURFACE

Clean with LATTE DETERGENTE or a neutral product. Do not clean with ethanol before 28 days have passed.

9. SAFETY RECOMMENDATIONS AND RISK IDENTIFICATION.

The products BASE A and INDURITORE B are classified as hazardous according to the provisions of Regulation (EC) No. 1272/2008 (CLP), see safety data sheet.

COMPONENT A contains: bisphenol-A / F-epichlorohydrin; epoxy resins (average molecular weight ≤ 700), oxirane, mono[(C12-14-alkyloxy)methyl]derivatives.

COMPONENT B contains: poly (oxy (methyl-1, 2-ethanediyl), trimethylhexan-1,6-diamine, benzyl alcohol.

Use and store the product according to current health and safety regulations; after use, do not dispose of containers to the environment; let residue dry thoroughly and handle as special waste. Keep out of the reach of children. If swallowed, seek medical advice immediately and show this container or label. Do not empty into drains, waterways or soil.

For more information, see safety data sheet available on: www.giorgiograesan.it

| TECHNICAL CHARACTERISTICS: APPLICATION | |
|---|--|
| Dilution | Not provided |
| Mixing | Mix BASE A with HARDENER B and stir for no more than 3 minutes to obtain a homogeneous mixture |
| Colouring | Not provided |
| Tools | KIT/NUDO spatula |
| Primer | Not provided |
| Conditions of application | From +10°C to +35°C with relative humidity < 85% |
| Number of coats | 2 |
| Surface drying time | 12 hours at 20°C. |
| Wait time for 2 nd coat | 24 hours at 20°C |
| Initial cure time | 72 hours at 20°C |
| Final cure time | 7 days to reach the definitive mechanical characteristics |
| Washability | Full wash with LATTE DETERGENTE |

| TECHNICAL CHARACTERISTICS: COVERAGE | |
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| IPER VETRO | 5 – 6 sqm/litre per coat Data is highly affected by the geometry of the substrate |

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| TECHNICAL CHARACTERISTICS: PRODUCT | |
|---|--|
| Composition | Two-pack, epoxy resin |
| Specific weight | 1.09 ± 0.03 kg/litre |
| pH | >8.0 – 8.5 after 30 days |
| EU limit value (Directive 2004/42/EC): two-pack performance coatings: 500 g/l | Maximum VOC content 26.0 g/l |
| Storage conditions | Keep in a cool, dry place at temperatures between +5°C and +30°C |
| Packaging | BASE A 0.670 litres HARDENER B 0.330 litres BASE A 1.675 litres HARDENER B 0.850 litres |

RESISTANCE TO MOST COMMON SUBSTANCES

| Substance | Result | Substance | Result |
|-----------------------|-----------|------------------------------------|----------------|
| Boiling water (100°C) | resistant | Kitchen salt (from 3% to 30%) | resistant |
| Water + 5% detergent | resistant | Nitric acid 5% | resistant |
| Wine | resistant | Benzene | less resistant |
| Beer | resistant | White spirit | less resistant |
| Caffeine | resistant | Hydrogen peroxide (3%) | resistant |
| Coca Cola | resistant | Caustic soda 10% | resistant |
| Chalk | resistant | Soda | resistant |
| Neutral detergents | resistant | Hydrochloric acid (from 5% to 20%) | resistant |
| LATTE DETERGENTE | resistant | Ethanol (10%) | resistant |
| Grape juice | resistant | Paint thinners | resistant |
| Lemon juice | Resistant | Ammonia (from 10% to 25%) | less resistant |
| Boiling oil | Resistant | Bleach | less resistant |
| Ketchup | Resistant | | |
| Mayonnaise | Resistant | | |
| Toothpaste | Resistant | | |

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