

## Description

Two component, High build polyamide cured Epoxy, reinforced with Aluminium flakes, suitable for use above and below the water line. A premium universal barrier coat offering superior protection against the phenomenon of Osmosis on GRP surfaces.

## Suggested uses

- As an osmosis treatment scheme primer.
- As a basis for Vemar's Epoxy Fillers range of products.
- As a premium surface tolerant epoxy primer for the under and above the water parts on all types of hull construction materials.
- As an intermediate or "tiecoat" to promote adhesion between chemically curing and physically drying products.

## Product details

|   |   |
|---|---|
| <b>Available shades:</b>                                | Dark silver, Blue silver                      |
| <b>Specific gravity:</b>                                | 1,22 ± 0,05 g/ml                              |
| <b>Sheen level @ GU 60°:</b>                            | Flat  |
| <b>Mixing ratio:</b>                                    | 4:1 (A:B) by Volume<br>4:0,75 (A:B) by Weight |
| <b>Thinning range:</b>                                  | 0-5% Thinner 850                              |
| <b>Typical thickness:</b>                               | 80 µm DFT / 140 µm WFT                        |
| <b>Pot life (20°C):</b>                                 | 3 hrs   |
| <b>Shelf life (20°C):</b>                               | 24 months (in airtight sealed containers)     |
| <b>Theoretical spreading rate (80 µm DFT):</b>          | 9,4 m²/L                                      |
| <b>Volume solids (A+B):</b>                             | 60% +/- 2%                                    |
| <b>VOC (as supplied) according to ISO 11890-2:2013:</b> | 380 g/L                                       |
| <b>Packaging:</b>                                       | Part A: 1 L, 4 L<br>Part B: 0,25 L, 1 L       |

## Overcoating / Drying

| Overcoated with | Surface Temperature |      |      |     |      |     |      |     |
|-----------------|---------------------|------|------|-----|------|-----|------|-----|
|                 | 5°C                 |      | 15°C |     | 20°C |     | 35°C |     |
|                 | MIN                 | MAX  | MIN  | MAX | MIN  | MAX | MIN  | MAX |
| ULTRAFINE       | 48 h                | 7 d  | 36 h | 7 d | 24 h | 3 d | 24 h | 2 d |
| ALUSHIELD       | 10 h                | 7 d  | 5 h  | 7 d | 3 h  | 3 d | 2 h  | 2 d |
| VEMASHIELD      | 10 h                | 7 d  | 5 h  | 7 d | 3 h  | 3 d | 2 h  | 2 d |
| ALUPRIME        | 10 h                | 7 d  | 5 h  | 7 d | 3 h  | 3 d | 2h   | 2 d |
| ANTIFOULING     | 10 h                | 24 h | 5 h  | 9 h | 3 h  | 7 h | 2h   | 4 h |

  

| Touch dry @ 20°C<br>ISO 1517 - 1973 | Through dry @ 20°C<br>ISO 9117-1990 | Fully cured @ 20°C |
|-------------------------------------|-------------------------------------|--------------------|
| 1 h                                 | 3 h                                 | 7 d                |

h=hours / d=days

## Surface preparation

**GRP:** Remove oil, grease or mould release agent (if any) with a suitable alkali detergent. Remove salt deposits, dust and/or other impurities by fresh water cleaning. Sand the surface to be coated with a grit size of 180-200 sandpaper to ensure adhesion. Remove the dust created by sanding. Make sure that the surface is completely dry prior to the application.

**Gelcoat:** Remove oil & grease (if any) with a suitable alkali detergent. Remove salt deposits, dust and/or other impurities by fresh water cleaning. Sand the surface to be coated with a grit size of 280-320 sandpaper. Remove the dust created by sanding. Make sure that the surface is completely dry prior to the application.

**Carbon steel:** Remove oil & grease (if any) with a suitable alkali detergent. Remove salt deposits, dust and/or other impurities by fresh water cleaning. Sand blast the surface to an Sa 2, preferably Sa 2 ½, degree of cleanliness according to ISO 8501 -1. In case of Water-jetting, the substrate to be painted should have a cleanliness degree of minimum Wa 2 (ISO 8501-4). A maximum Flash rust M, preferably L, will be acceptable according to ISO 8501-4. Mechanical treatment should be used only for small repairs with a minimum achieved St2 degree, preferably St3 (ISO 8501-1). The final surface profile should correspond to ISO 8503 Comparator Medium (G) or Rugotest No.3, BN10.

**Stainless steel/Aluminium:** Remove oil & grease (if any) with a suitable alkali detergent. Remove salt deposits, dust and/or other impurities by fresh water cleaning. Grit blast the surface with non-metallic abrasive types (ISO 11126) to a rough profile (approx. 50-75 µm).

**New Wood:** Sand the surface to be coated with a grit size of 80-120 sandpaper to ensure adhesion. Remove the dust created by sanding. Make sure that the surface is dry prior to the application. Humidity must be less than 18% RH.

Improved surface preparation will improve adhesion and consequently the expected lifetime of the paint system.

## Application guidelines

**Temperature:** The temperature of the surface to be coated should be at least 3°C above the dew point. Good painting practice must always be followed.

Minimum application temperature is 5°C. Maximum application temperature is 35°C (For temperatures over 35°C special measures should be taken). Do not apply at a relative humidity (RH) exceeding 85%. Pls. consult your VEMAR representative.

The temperature of the product in the can must be between +10°C- +35°C. The ideal temperature, in order to obtain full product application characteristics, is +20°C.

**Mixing:** Mix carefully Part A with Part B according to the mixing ratio indicated until a Homogenous mixture is achieved. Use the product until the maximum indicated pot life is reached. In colder temperatures (<10°C) allow an induction time of 5 min prior applying the product.

**Method:** Conventional spray / Brush / Roller / Airless spray. The applicator should choose the appropriate method taking into consideration the area to be covered the desired finish result, environmental issues, weather conditions, project's schedule and available equipment. You may find below indicative adjustment according to the application method used. For more information on the appropriate equipment and guidance pls. contact your local VEMAR representative.

| Method            | Brush/Roller | Conventional/Air spray | Airless Spray   |
|-------------------|--------------|------------------------|-----------------|
| Thinning*         | up to 5%     | up to 5%               | up to 5%        |
| Tip orifice*      | -            | HVLP 1,8-2,0 mm        | 0,013''-0,019'' |
| Pressure (@ tip)* | -            | 1,5-2,0 bar            | 200 bar         |
| Pump ratio*       | -            | -                      | 45:1            |

*\*The above information is indicative and may be used as guidance only.  
Actual values may differ according to actual prevailing conditions.*

**Recommended specification**

Pls. consult VEMAR's Technical guide or your local VEMAR representative.

**Indicative thickness / coat**

| Application method           | DFT* Range | WFT* Range |
|------------------------------|------------|------------|
| Conventional / Airless spray | 50-70 µm   | 80-120 µm  |
| Brush / Roller               | 40-60 µm   | 70-100 µm  |

\*DFT= Dry film thickness WFT= Wet film thickness

The above data indicates the range where the product has been tested thus will provide the application characteristics and the performance as described. Application in thickness outside the indicative range may result in early failure/degradation of the coating system.

**Tool cleaning**

After use, clean equipment thoroughly with Thinner 850.

**Storage**

Store in a cool and shaded area in temperatures +5°C up to +25°C. Storage in temperatures higher than indicated will reduce the shelf life of the product.

**Health, safety & protection**

Always use appropriate safety equipment for your face, eyes and skin. Make sure that the area where the product is being used is well ventilated. ALWAYS CONSULT THE MATERIAL SAFETY DATA SHEET BEFORE USE. Do not pour the containment or any remains in an aqueous environment or drainage. Do not dispose remains in municipal waste areas. Consult your local authorities for the disposal of any remains or empty cans.

**Disclaimer**

The information, data, guidance and any recommendations provided herein are based on Vemar's know-how, laboratory testing and obtained experience and is correct to the best of our knowledge. Users should contact their closest Vemar representative in order to receive guidance according to their special application needs not referred in this document. The performance of the product under the actual conditions of any intended use where Vemar will not have access to the various conditions affecting the use and application of the product, is not guaranteed and must be determined by the user. This document may be altered any time in the context of Vemar's continuous improvement and development. The supplied products and all technical assistance will be under the General condition of sales & delivery. By using this product as recommended in this document it is stated that the manufacturer and or seller, and the buyer and or user waives all claims involving, any liability, included but not limited to negligence, injury or direct or consequential losses or damages.