

## Epigard

### Waterproof Membrane

#### Description

A two component extended epoxy high build coating characterised by its inbuilt flexibility, excellent adhesion and resistance to water and a wide range of chemicals. Epigard will successfully protect concrete structures including abutments, wing walls and bearing shelves, drainage channels, silos and tanks.

#### Advantages

- No primer required.
- Excellent bond strength.
- Good chemical and abrasion resistance.
- Inbuilt flexibility.


#### Applications

- Chemically resistant/waterproof protective coating for concrete and steel structures.

#### Technical Information

|                    |                       |
|--------------------|-----------------------|
| Type               | Epoxy                 |
| S.G.               | 1.3                   |
| Pot Life           | 65 Minutes @ 20°C     |
| Pot Life           | >2 Hours @ 5°C        |
| Full Cure          | 7 Days                |
| Hardness           | 70 (Shore D)          |
| Coverage           | 4-6m <sup>2</sup> /kg |
| Dry Film Thickness | 170 micron per coat   |

Tested at 23°C, unless otherwise stated.

|   |  |
|---|--|
| <br>0086   |  |
| Nufins, Kingston House,<br>3 Walton Road, Pattinson North, District 15,<br>Washington, Tyne & Wear, NE38 8QA<br>13<br>0086-CPR-594215 |  |
| EN 1504-2<br>Surface protection system for concrete<br>Coating  |  |
| Permeability to CO <sub>2</sub>   | s <sub>D</sub> >50m                      |
| Permeability to Water Vapour  | Class 1                                  |
| Capillary Absorption & Permeability to Water  | <0.1 kg/m <sup>2</sup> /H <sup>0.5</sup> |
| Adhesion  | ≥1.5 MPa                                 |
| Dangerous substances  | Complies with 5.3                        |

#### Chemical Resistance

|                                  |      |
|----------------------------------|------|
| Hydrochloric Acid (Conc.)        | Fair |
| Nitric Acid 25%                  | Good |
| Sulphuric acid 50%               | Good |
| Sodium Hydroxide 50%             | Good |
| Ammonia 10%                      | Good |
| White Spirit                     | Good |
| Methylated Spirit                | Good |
| Xylene                           | Good |
| Lubricating Oil                  | Good |
| Petrol                           | Good |
| Skydrol                          | Good |
| Sodium Hypochlorite (Bleach)     | Good |
| Salt (Sodium Chloride saturated) | Good |
| Ammonium Sulphate 10%            | Good |



## Technical properties of Epigard.

| Properties  | Standard      | Performance Requirements                   | Declared Value                             |
|---|---------------|--|--|
| Appearance  |               |  | Resinous Coating                           |
| Solids Content                                      |               |  | >90%                                       |
| Specific Gravity                                    |               |  | 1.31                                       |
| Viscosity   |               |  | 1120 Cps                                   |
| Working Life  |               |  | 50-65 Minutes                              |
| Coverage  |               |  | 4-6m <sup>2</sup> /kg                      |
| Application Temperature                             |               |  | 7°C to 35°C                                |
| Maximum intercoat period                            |               |  | 48 Hours @ 20°C                            |
| Permeability to Water Vapour                        | EN ISO 7783-1 | S <sub>D</sub> >50m                        | S <sub>D</sub> >50m (Class III)            |
| Capillary Absorption & Permeability to Water Vapour | EN 1062-3     | W<0.1 kg/m <sup>2</sup> /Hr <sup>0.5</sup> | W<0.1 kg/m <sup>2</sup> /Hr <sup>0.5</sup> |
| Tear Strength                                       |               |  | >6 MPa                                     |
| Tensile Strength                                    | BS 2782-3     |  | >8 MPa                                     |
| Elongation  | BS 2782-3     |  | 30%  |
| Slip Resistance                                     | EN 13036-4    |  | Class 1                                    |
| Adhesive bond Strength                              | EN 1542       | >1.5 MPa                                   | >2.0 MPa                                   |
| Adhesion After Freeze/Thaw (50 Cycles with salt)    | EN 13687-1    | >1.5 MPa                                   | >2.0 MPa                                   |
| Adhesion after Thunder Shower (30 Cycles)           | EN 13687-2    | >1.5 MPa                                   | >2.0 MPa                                   |
| Adhesion After Dry Cycling (30 Cycles)              | EN 13687-4    | >1.5 MPa                                   | >2.0 MPa                                   |

Technical data shown are statistical results and do not correspond to guaranteed minima.

Tolerances are those described in appropriate performance standards.

All testing was performed at 23°C, unless otherwise specified.

1 N/mm<sup>2</sup> = 1 MPa

1 kN/mm<sup>2</sup> = 1 GPa



## Surface Preparation

All surfaces should be clean, dry, free from oil, grease and chemical contamination. Oil and grease can be removed using *Desolve*.

Concrete surfaces should be free from laitance, this should be removed by either scarifying, wire brushing or preferably by high pressure water or sand blasting. Blow holes or other surface irregularities should be repaired using *Nupatch Cosmetic* or *Epolite*. Concrete surfaces should be at least 21 days old.

## Mixing

Use only full packs. The entire contents of the hardener tin should be added to the base tin and slowly stirred until thoroughly mixed, taking care not to entrain air into the mix. Care should be taken to prevent unmixed material remaining on the side of the tin.

## Application Instructions

Epigard may be applied by brush, roller or airless spray. The first coat may be tinned with up to 10% *Nuwash* to aid application. Two coats are normally applied. All equipment should be cleaned with *Nuwash* immediately after use.

## Packaging

Epigard is available in 5 kg units.

## Storage

Epigard has a 12 month shelf life when unopened at normal room temperatures. If stored in cold conditions the containers should be warmed prior to use as this will assist mixing and application. Epigard should be stored away from foodstuffs and out of the reach of children.

## Health & Safety

Product Safety Data Sheets (SDS) are available from Nufins. SDS sheets are provided to help customers satisfy their safe handling, use and disposal needs as well as assist with any conformance requirements made locally by health and safety regulations.

SDS are continually updated to provide the latest information to our customers. We therefore recommend contacting our head office to obtain the most recent and accurate SDS before handling and using any product.

## Limitations

Do not apply at temperatures below 7°C.

## Technical Support

Through our technical department and laboratories we can offer a comprehensive service to specifiers and contractors. Technical contacts are available throughout the UK to provide further information and arrange demonstrations.

