# **Technical Datasheet**

# **Epigard**

### Waterproof Membrane



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**

Туре	Ероху	
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	4-6m²/kg	
Dry Film Thickness	170 micron per coat	

Tested at 23°C, unless otherwise stated.



Nufins, Kingston House, 3 Walton Road, Pattinson North, District 15, Washington, Tyne & Wear, NE38 8QA

**Nufins** 

13

0086-CPD-594215

EN 1504-2 Surface protection system for concrete Coating

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 Datasheet**



### **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			4-6m²/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/m²/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.

- $1 \text{ N/mm}^2 = 1 \text{ MPa}$
- $1 \text{ kN/mm}^2 = 1 \text{ GPa}$









## **Technical Datasheet**



### **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**

Epigard, like similar products, is capable of irritating unprotected sensitive skin, we therefore recommend the use of a suitable barrier cream and/or gloves.

#### 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 representatives are available throughout the UK to provide further information and arrange demonstrations.







