FRINICS CHEMICALS
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ISO 9001

BUILDING CHEMICALS SPECIALISTS

UNIGUARD

2 part Epoxy Paint for Floors

Product Data

Uniguard Epoxy Paint for Floors is a two part Solvent Less Coloured Epoxy Resin Coat System and can be applied to many surfaces including concrete, steel and timber. Product is according to **European Standard EN 13813:2002 Screed materials and floor screeds - Screed materials - Properties and Requirements.**
It provides a smooth easily cleaned and durable surface, which is resistant to oil, dirt and many chemical environments.

Typical Uses

It is used extensively for applications in warehouses, factories, and schools parking areas and other up to medium heavy wear industrial area. A slip resistant finish is also available by sprinkling aggregate into the surface.

Reasons for using Uniguard

- Excellent abrasion resistance and durability.
- Oil and water resistant.
- Good Resistance to Dilute Chemical Solutions
- Easy to apply and has good Resistant to alkalies.
- Provides a smooth easily maintained floor.
- Suitable for Light to medium Warehouse Traffic and parking areas Traffic
- Dustproof, lightfast and colour stable.
- Slip resistant finish is also available.

Preparation

Surfaces must be free from loose dust, debris and other contaminants. Any oil or grease deposits can be removed by a hot detergent wash with a suitable cleaner available from Frinics Chemicals.
Any laitance or ingrained oil and grease will require mechanical removal by using grid blasting machine. Dust must be removed by vacuum machine before application of the product. Damage to substrate or incorrect falls should be rectified using suitable screed available from Frinics Chemicals before applying the **Uniguard system.**

Substrates:

Concrete Substrate must be strong, stable and sound with a minimum compressive strength 25N/mm2.
Also substrate can be Steel and Timber.
For application on previous flooring please contact **Frinics Chemicals Ltd** for Technical services for specific advice.

Mixing
Uniguard Paint is supplied in a **two part system**, comprising of a **UNI - Primer** and **Uniguard Paint**, both have a base and hardener components.

UNI - Primer - Add the primer hardener to the contents of the primer base and mix thoroughly.
Allow to stand for 5 minutes before application onto prepared concrete.

Uniguard Paint - The pigmented base must be thoroughly stirred and agitated to disperse sedimentation and achieve consistency of colour. The hardener should then be added to the base component and mixed thoroughly.

Application

The **UNI - Primer** and **Uniguard Paint** can be applied using a suitable brush or roller or airless spray to achieve an even substantial coat of the surface area in a sufficient thickness. Curing or over coating time is dependent upon temperature.

If **UNI - Primer** is left for more than 24 hours before overcoating it will be necessary to re-prime.
For general use 1 coat UNI - Primer and 2 coats of Uniguard Paint is recommended.

Slip resistance - Slip resistance can be added by simply sprinkling special sands into the 2rd coat whilst the final coat is still wet and then seal with the last 3th coat.

The method of application is first to apply the **UNI - Primer** and then to broadcast about 0.5-1.0 kg/m2 of **silica sand** into the 2nd **Uniguard Paint** Coat whilst it is still wet. Allow to dry, then remove all loose unrestrained sand and apply the 3rd coat of **Uniguard Paint** Coat to seal the system as described below.

Note: Uniguard Paint material consumed on the final coat will increase relative to the aggregate used.

The full system is therefore:

1st Coat: UNI - Primer

2nd Coat: Uniguard Paint
and slip resistant silica sand if required, sprinkled whilst coat is still wet.

3rd Coat Uniguard Paint
to seal slip resistant silica sand.

Physical Data

Finish: Smooth, space gloss
Slip resistant finish is also available

Colours: **Uniguard Base**: Coloured Liquid
Uniguard Hardener: Transparent Liquid
Finish product: Grey, Red, Green, Liquid.
(Other colours are available, subject to min. order qty.)

Components: **UNI - Primer:** 2
Uniguard Paint: 2

Temperature resistance: up to 60°C

Recommended Thickness:
UNI - Primer: 150-200 microns
Uniguard Paint: 175-200 microns for each coat

Total dry film thickness:
1 coat **UNI - Primer** + 2 coats **UNIGUARD Paint**
500-600 microns

Curing mechanism: Chemical reaction

Curing Time at 20°C:
Light Foot Traffic: 24 hours
Full Cure: 7 days

Overcoating time:
UNI - Primer: 10°C 16-36 hours
20°C 12-24 hours
(**UNI - Primer** will remain slightly tacky, this is normal)

Uniguard Paint: 10°C 18-28 hours
20°C 12-20 hours

Pot Life at 20°C:
UNI - Primer: 30 minutes (approx.)
Uniguard Paint : 40 minutes (approx.).

Practical coverage:

It depends upon the substrate condition and profile.
UNI - Primer: 0.25kg/m^2
A 5.0kg unit of primer covers approximately 20m^2.

Uniguard Paint: 0.25kg/m^2/coat
A 5.0kg unit of topcoat covers approximately 10m^2 for 2 coats.

Equipment Cleaner: Frinics G.P. Solvent

Density: **Uniguard Paint Base:** **~1.43 kg/ltr**
Uniguard Paint Hardener: **~1.03 kg/ltr**
Uniguard Paint Mixed Resin: **~1.34 kg/ltr**

All Density values at 23ºC (EN ISO 2811-1)

Solid Content: **~100% (by volume)**
~100% (by weight)

Mechanical Characteristics:
Compressive Strength: 60 N/mm^2
(28 days/+23ºC) EN 196-1

Flexural Strength: 30 N/mm^2
(28 days/+23ºC) EN 196 – 1

Bond Strength: 2.0 N/mm^2 (EN 4624)
Shore D Hardness: 80 (7 days/+23ºC) DIN 53 505

Abrasion Resistance: 70 mg
(8 days /+ 23ºC) DIN 53 109
Uniguard Paint is Resistant to Rolling Load and is non Flammable

Pack sizes:
UNI–Primer & Uniguard Paint base 3.75 kg in 5 ltr tin
UNI Primer & Uniguard Paint Hard. 1.25 kg in 3 ltr tins

Shelf life:
UNI - Primer and **Uniguard Paint** component: 1 year in unopened containers

Protect from extreme temperatures and keep dry during shipment and storage. Discard damaged or open containers

Limitations
All Frinics products are manufactured to a high standard of quality. They are sold subject to Frinics Conditions of Contract or Sale - copy available upon request. Whilst Frinics strives to ensure that any advice, information or recommendations given are appropriate and correct, it cannot, since it does not have complete control over the method and place of application of the products, accept any liability directly arising out of the use of products.

Health and Safety at Work
Warning and information concerning the safe handling and use of our products are displayed on their containers and in a Health and Safety data sheet. It is the Purchaser's responsibility to ensure that the materials are stored and handled safely.

Safety Precautions
Read each component's Material Safety Data Sheet before use. Mixed material has hazards of each component. Safety Precautions included with Application Instructions must be strictly followed during storage, handling and use. Improper use and handling of this product can be hazardous to health and cause fire or explosion.

Safety Equipment Required
Suitable eye protection and clothing must be worn this preparation. When applied by Spray, HSE type musk must be used.
Normal precautions should be taken during application to provide adequate ventilation, particularly when working in enclosed spaces.

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