

# **UltraGuard PE 40**

Single component eco-friendly high build hydrophobic coating for foundations

## PACKAGING

**UltraGuard PE 40** is supplied in 19 litre units and available in Grey.

## STORAGE AND SHELF LIFE

Store in original containers, tightly sealed, under dry conditions and at temperatures between 15-25°C. Do not expose to direct sunlight. The shelf life is 12 months in unopened drums when stored in cool and dry conditions at temperatures between 15-25°C.

## DESCRIPTION

**UltraGuard PE 40** is a single component, high performance, protective waterproof coating based on ester/acrylic polymers.

**UltraGuard PE 40** is designed as a protective coating for underground structures / foundations and can be used as a curing compound when applied over freshly casted concrete.

When cured it provides excellent abrasion and chemical resistance.

## USES

**UltraGuard PE 40** is developed to protect concrete substrates from corrosion and deterioration. It is an ideal protective coating for underground structures and foundations and can be applied on green concrete, serving as a curing compound as well as protection.

## **ADVANTAGES**

- Water Based one component and easy to apply
- Good chemical and abrasion resistance
- UV stable
- Environmentally friendly
- Can be applied over green concrete to act as a curing compound in addition to a protective coating
- Can be applied on damp concrete after 24 hours of casting
- Environmentally friendly and safe to use (free from solvents)

## **TYPICAL PROPERTIES \***

Surface drying time @ 25°C ASTM D 1640	approx. 30 minutes
Density ASTM D1475	1.35kg/L ± 0.5 g/cm <sup>3</sup>
Adhesion strength (BS EN 1015-12:2000):	>1.2 N/mm <sup>2</sup>
Re-coat interval @ 25°C	6-7 hours
Volume Solids ASTM D2697-03	45%
Water permeability BS EN 12390-8: 2009 @ 5 bar pressure	Nil
VOC EN ISO 11890 Part 2	Approx. 13g/L
Water absorption BS 1881 Part 122	0.2%
Chloride lon penetrability AASHTO T277	Very low

\* Properties listed are based on laboratory-controlled tests.



## CHEMICAL RESISTANCE

**UltraGuard PE 40** meets ASTM D 543 requirements in resisting the chemicals below:

Copper Sulphate solution. 25%	Good*
Acetic Acid 20%	Good*
Nitric Acid 5%	Good*
Ethylene Glycol 40%	Excellent
Magnesium Sulphate soln. 25%	Excellent
Distilled Water	Excellent
High Sulphate Water	Excellent
Tap Water	Excellent
Sea Water	Excellent
Ground Water	Excellent

\*Resistant with slight discoloration

#### **APPLICATION METHOD**

Prior to application, the temperature of the material should be in the range of 15-40°C. **UltraGuard PE 40** should be well stirred before use. **UltraGuard PE 40** can be applied by brush, short nap paint roller or airless spray.

## THEORETICAL COVERAGE RATE

2.5m<sup>2</sup> per liter @ 400-micron wft / coat (Two coats application recommended). Please refer to Gulf Additive Factory Method Statements for system specific coverage rates.

The curing time of the material is influenced by the humidity, wind speed, ambient and substrate temperatures. At high temperatures the time required for the coating to be surface dry is shortened accordingly. (See MS for full details).

## SUBSTRATE PRE-TREATMENT

The surface to which **UltraGuard PE 40** is applied should be clean and free from oil, salt, grease, and any other substances which may impair adhesion.

Application should take place within the re-coat intervals of the coating.

If the re-coat interval is missed, then the coated surface should be lightly abraded and cleaned prior to recoating.

## CHEMICAL RESISTANCE

**UltraGuard PE 40** is meant to be used as a protective coating against below ground environment and external applications. It is not suitable to be used as a high chemical resistant coating against strong acids and alkalis. Contact your local Gulf Additive Factory office for specific details.

### HEALTH AND SAFETY

Avoid contact with skin and eyes. Wear protective gloves, goggles, and clothing. In case of skin contact, rinse immediately with soap and water! In case of eye contact, bathe eyes with water at once, then consult a doctor.

Standard industry manual handling and hygiene precautions should be adopted while handling the product.

### QUALITY AND CARE

All products originating from Gulf Additive Factory, Qatar facility are manufactured under a management system independently certified to conform to the requirements of the quality, environmental and occupational health & safety standards ISO 9001 and ISO 14001.

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