

CHEMGUARD 400

PROTECTIVE COATING AND WATERPROOFING FOR CONCRETE

DESCRIPTION

A high build, high solids Elastomeric protective coating and waterproofing for concrete.

Chemguard 400 is designed to provide protection against the ingress of chlorides and carbon oxides that threaten the durability of concrete structures.

RECOMMENDED USE

Chemguard 400 is formulated to effectively protect a wide range of substrates both new and old. It is ideally suited for the protection of concrete, block work, metal, plaster and bituminous surfaces.

Also recommended for upgrading weak, deteriorated porous substrates that are not paintable with conventional coatings. Because it's high build elastomeric properties, Chemguard 400 easily fills in and bridges hairline cracks.

SURFACE PREPARATION

Surfaces must be clean and sound. Employ adequate methods to remove dirt, dust, oil and all other contaminants that could interfere with adhesion.

Concrete must be cured at least 28 days at 21oC and 50% RH or equivalent time. Remove fins and other protrusions by stoning, sanding or grinding. Voids in the concrete may require surfacing. Blow or vacuum off sand and dust.

MIXING

Power mix to achieve homogeneous appearance. Avoid excessive air entrapment.

THINNING

Potable water if required .

APPLICATION

Use a medium bristle brush or short-synthetic roller .Consult Unichem Technical Support Department for spray equipment and application instructions.

DRYING TIME

Touch dry surface 2 hours Top coat 12 hours

Full cure 7 days at 24°C and 50% RH

TECHNICAL INFORMATION

White, light grey; other Color

colors upon request

Specific gravity 1.40 ±0.02

Non - flammable Flash point

Solids by volume 50%

Moisture Vapor 0.74m (equivalent air lay-

Transmission er thickness)

Carbon Dioxide $3.50 \times 10^{-7} \text{ cm}^2 \text{ s}^{-1}$ Diffusion

4.26x10⁵ μ-Value

R (equivalent air lay-181m (Klopfer criteria

er thickness) >50m)

Elongation 200% (DIN 53455)

1.8mm/1800µm (Class Crack bridging prop-A4; BS EN 1062-7 Method erties

A)

without trafficking ≥1 Adhesion Pull-off Without trafficking ≥ 2 (BS test

EN 1542)

≤150mm within 60s

Flame Spread (compliant to BS EN ISO

11925-2:2002)

Class E (BS EN 13501-Reaction to Fire Clas-

1:2007 +A1:2009) sification

-20°C to +50°C Service Temperature

Water Vapor Transmission Rate:

Specimen N	١o.	145624E	145624F	145624G
Flux (g/m ² .2	4hr)	49.48	62.08	46.74
DH2O Coat (cm ² s ⁻¹)	ing	1.39x10 ⁻⁴	1.35x10 ⁻⁴	129x10 ⁻⁴
μ-value		$1.83x10^{3}$	$1.35x10^{3}$	$1.96x10^3$
Sp (m)		0.79	0.58	0.85
Mean DFT (μm) 424			424	424

Min. Temperature

Max. Temperature 42°C

Relative Humidity 85%

THEORETICAL COVERAGE

The coverage rate is around $4.5m^2/L$ at 113μ thickness

5°C

SHELF LIFE

12 months when stored properly in unopened container in dry conditions at 10 - 25°C.

CLEANUP

Tools and equipment can be cleaned water. Dried Chemguard 400 should be removed mechanically.

PACKAGING

Chemguard 400 is available in 19 Liter Kit.

PRECAUTIONS

KEEP OUT OF REACH OF CHILDREN. Use with adequate ventilation and use a respirator when levels are above applicable limits.

Avoid contact with skin and eyes. Close container after each use. Use good hygiene when handling this product.

TECHNICAL SUPPORT

Technical assistance is available from the manufacturers trained field representatives.

UPDATED

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Unichem Product Group

Unichem offers a wide range of industrial coatings, fireproofing and construction chemicals products that are manufactured, which include:

Intumesent coatings
Fire retardants
Industrial floorings.
Steel and industrial coatings
Waterproofing.
Grouts and anchoring
Concrete repairs.
Structural protection.

United Chemical Company

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