SpECcoat CRE200

NON-TOXIC, MOISTURE TOLERANT, SOLVENT-FREE EPOXY RESIN COATING

DESCRIPTION

SpECcoat CRE200 is a two-pack, solvent-free, epoxy resin coating. It is supplied in pre-measured quantities ready for mixing on site. The product, on curing, produces a smooth, tough, chemical resistant coating.

SpECcoat CRE200 may be used as a protective coating for concrete and mild steel. The coating, once cured, is resistant to common chemicals and abrasion. It is particularly suited for applications in water tanks, waste water treatment environments, dairies, food processing plant, abattoirs and grain silos.

ADVANTAGES

- Non-toxic
- Solvent-free therefore may be used in confined areas
- High build
- No primer required on concrete or mild steel
- Easily cleaned surface
- Resistant to a wide range of chemicals
- Corrosion and abrasion resistant

STANDARD

SpECcoat CRE200 complies with BS 6920: Part 1 as a coating suitable for contact with potable water

TECHNICAL DATA

Typical values @ 20°C	
Solids content	100%
Gel time (minutes)	80 - 120
Overcoating times (hrs)	8 - 20
Full cure	7 days
Typical system thickness	400µm
Pull-Off Bonding Strength on Concrete (ASTM D 7234)	≥ 2.0 MPa (or substrate failure)
Water Penetration Resistance (BS EN 14891) : 1.5 bars @ 7 days.	No penetration
Resistance to Growth of Mold (ASTM D 3273)	Pass

CHEMICAL RESISTANCE CHART

ACIDS	
10% Sulphuric acid	Excellent
Hydrochloric acid	Excellent
10% Phosphoric Acid	Excellent
10% Hydrofluoric acid	Excellent
Citric acid	Excellent
1% Lactic acid	Excellent
Conc. Sulphuric acid	Good
Conc. Hydrochloric acid	Good
Conc. Phosphoric acid	Good

ALKALIS	
Sea water	Excellent
25% Sodium Hydroxide	Excellent
Sodium Carbonate	Excellent
Calcium Carbonate	Excellent
Dilute Sodium Hydroxide	Good
Conc. Sodium Hydroxide	Good
Ammonia salts	Good
Dilute Ammonia Hydroxide	Good
Conc. Ammonia Hydroxide	Good

SALT SOLUTIONS	
Potassium/Aluminium Sulphate	Excellent
Ferrous Sulphate	Excellent
Calcium Chloride	Excellent
Sodium Phosphate	Excellent
Copper Phosphate	Excellent
Sodium Sulphate	Excellent
Sodium Chloride	Good
Sodium Acetate	Good

Solvents

Petrol	Excellent
Kerosene	Excellent

FATS & OIL

Animal	Excellent
Vegetable	Excellent
Mineral	Good

WATER

Chlorinated water	Excellent
Distilled water	Excellent

APPLICATION

Preparation

It is essential that adequate preparation is carried out prior to the application of **SpECcoat CRE200**.

For concrete and steel surfaces, grit blasting is recommended. Steel surfaces should be prepared to bright metal Standard. The preparation should ensure the removal of old coatings, laitance, curing compounds, grease and oil.

Any imperfections or 'blow holes' should be filled using **SpECcoat BC**.

Mixing

SpECcoat CRE200 is supplied in a two-component kit consisting of a base component and a curing agent.

The contents of the base component must be stirred thoroughly to disperse settlement. The total contents of the hardener component should be added to the base, taking care to scrape the sides of the can. Mechanical mixing must be used incorporating a suitable mixing paddle attached to a heavy duty, slow speed drill.

Mixing paddles are available from **Speciality Engineering Chemicals** on request.

Application

The mixed material should be applied by suitable brush.

The first coat should be applied to the substrate using a scrubbing action to ensure a uniform build of not less than 200µm. The first coat should be allowed to dry for at least 8 hours at 20°C or 4 hours at 35°C. The maximum quoted overcoat times should also be complied with (see above). The second coat must be applied exactly as above resulting in a film thickness of at least 200µm.

Should spray application be considered, contact our Technical Department.

EQUIPMENT CLEANING

Tools and equipment should be cleaned immediately using **SpECtop Cleaning Fluid**. Cured material can only be removed by mechanical means.

PACKAGING AND YIELD

SpECcoat CRE200 is supplied in the pack sizes given below with the following recommended coverage rates:

SpECcoat CRE200

4.5 litres and 15 litres

@ 200 µm wft:	5.0m²/litre/coat (minimum 2 coats)

N.B. Due to wastage factors and the varied nature of substrates, actual coverage rates may be significantly reduced.

APPLICATION TEMPERATURE RANGE

Minimum	5°C
Maximum	35°C

At temperatures above this range the material should be stored in air-conditioned storage. At temperatures above 35°C the pot life of the product will be reduced.

STORAGE AND SHELF LIFE

SpECcoat CRE200 has a shelf life of 12 months when stored in original containers in a cool dry environment.

HEALTH AND SAFETY

SpECcoat CRE200 & **SpECtop Cleaning Fluid** should not come into contact with eyes or skin or ingested. When using **SpECtop Cleaning Fluid** ensure adequate ventilation and avoid inhalation of vapour. Wear adequate protective clothing including gloves and eye protection.

If contact with skin occurs, rinse with water then clean using soap and water.

If eye contact occurs, rinse with copious amounts of water and seek medical assistance.
If swallowed, DO NOT induce vomiting. Seek medical attention immediately.

FLAMMABILITY

SpECcoat CRE200 is non-flammable.

FLASH POINT

SpECcoat CRE200	>150°C
SpECtop Cleaning Fluid	>40°C

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