



DRI-GARD CF 900

High performance methyl methacrylate (MMA) coating

One-part, solvent based methyl methacrylate (MMA) protective coating that is resistant to weathering, alkalis and ageing. It protects concrete against aggressive attacks from the atmosphere and has a self-cleaning effect on the treated surfaces, without adversely influencing the characteristic texture of concrete.

FEATURES/BENEFITS

- Excellent weather resistant
- Fast drying with fast evaporating solvents
- Protects against aggressive atmospheric attacks
- Protects and enhances concrete & other cementitious materials
- High diffusion resistance against carbon dioxide
- Excellent dirt pick-up resistance
- Highly UV-resistant MMA
- Water vapour permeability not adversely affected

APPLICATION AREAS

- Concrete
- Cementitious surfaces
- Masonry
- Steel structure
- Metal substrates

PRODUCT DATA

Appearances / Colours	Clear / Coloured
Packaging	20 L pail
Storage	12 Months from date of production
Storage Condition	Store properly in original, unopened and undamaged sealed packaging in cool and dry conditions. Protect from direct sunlight and frost.

TECHNICAL DATA

Origin	Acrylate resin in solvent	
Specific Gravity	1.2 – 1.4	
Solid Content	~ 43% (dependent on colour)	
Flash point	Above 35 °C	
Carbon Dioxide Diffusion Resistance	> 250 m equivalent thickness of air	(BS EN 1026-6:2002, Method B)
Water Vapour Transmission	> 13 h/m ² /day	(BS EN ISO 7783-1:2000)
Reduction in Chloride Ion Penetration	> 90% at 28 days	(BS EN ISO 7783-1:2000)
Freeze/Thaw Salt Scaling	Unaffected by 50 exposure cycles (no scaling effect)	(ASTM C672-12)
Reduction in Water Absorption	> 80% at 28 days	(ASTM C642-06)

APPLICATION CONDITIONS

Consumption	Clear coat: approx. 0.15 kg/m ² per coat Top Coat: approx. 0.20 kg/m ² per coat								
Substrate Temperature	5 – 35 °C At rising temperatures, do not apply to concrete substrates without a pore sealer.								
Relative Humidity	< 85%								
Dew Point	Temperature must be at least 3 °C above the dew point								
Waiting Time / Overcoating	Waiting time between coats:								
	<table border="1"> <thead> <tr> <th>Substrate Temperature</th> <th>Time</th> </tr> </thead> <tbody> <tr> <td>10°C</td> <td>8 hours</td> </tr> <tr> <td>20°C</td> <td>5 hours</td> </tr> <tr> <td>30°C</td> <td>3 hours</td> </tr> </tbody> </table>	Substrate Temperature	Time	10°C	8 hours	20°C	5 hours	30°C	3 hours
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Note: Refresher coats of DRI-GARD CF 900 can be applied without priming if the existing coating has been thoroughly cleaned.									
Curing Treatment	No special curing required. However, the coating must be protected from rain for at least 1 hour at 20°C (dust dry in 30 minutes at 20°C)								
Applied Product Ready for Use	Full cure at approx. 5 days at 20 °C								

Standard System:

DRI-GARD CF 900 Clear Glaze

As a protection and enhancement of exposed aggregate concrete:

2 x DRI-GARD CF900 Clear Glaze

DRI-GARD CF 900 Top Coat

In normal situation:

3 x DRI-GARD CF 900 Top Coat

When combined with hydrophobic impregnation priming coats:

1 – 2 x DRI-GARD CP 700

2 x DRI-GARD CF 900 Top Coat

out adhesion testing on a small scale prior to full scale operations.

Metal Substrates with Existing Coating:

Existing coatings must be tested to confirm their adhesion to the substrate. Adhesion should have > 1.5 N/mm² with no single value below 1.0 N/mm². In the case of inadequate adhesion, existing coatings must be completely removed by suitable methods and the substrate must be sufficiently sound and suitable to be coated as above. Thorough cleaning of all surfaces by solvent cleaning (e.g., DRI-GARD SP 101) or high-pressure water jetting. Normally, DRI-GARD CF 900 can be applied on existing coating without any priming – It is recommended to carry out adhesion testing on a small scale prior to full scale operations.

SUBSTRATE PREPARATION

Exposed Concrete without Existing Coating:

The surface must be dry, sound and free from loose and friable particles, and any other contaminants. Suitable preparation methods are steam cleaning, high pressure water jetting or blast cleaning. New concrete must be at least 28 days old. If required, a levelling pore sealer should be applied. For cement-based products, allow a curing time of at least 4 days before coating.

Exposed Concrete with Existing Coating:

Existing coatings must be tested to confirm their adhesion to the substrate. Adhesion should have > 1.0 N/mm² with no single value below 0.7 N/mm². In the case of inadequate adhesion, existing coatings must be completely removed by suitable methods and the substrate must be sufficiently sound and suitable to be coated as above. Thorough cleaning of all surfaces by means of steam cleaning or high-pressure water jetting. Normally, DRI-GARD CF 900 can be applied on existing coating without any priming – It is recommended to carry

APPLICATION

For use on very dense substrates, the first coat of DRI-GARD CF 900 shall be thinned with up to 10% thinner.

DRI-GARD CF 900 (clear glaze and top coat) can be applied by brush or short-piled lambskin roller.

The top coat can also be applied by airless spray: Thinning: Up to 7% max. Spray pressure 150 bars, nozzle bore 0.38 – 0.66 mm, spray angle 50 – 80°.

TOOLS

Clean all tools and application equipment with thinner immediately after use. Hardened and/or cured material can only be mechanically removed.

LIMITATIONS

- Do not apply when there is expected rain, relative humidity >85% and/or temperature below 5 °C and/or below dew point.
- In marine environments or if the concrete surface is exposed to splashes of de-icing salts, an impregnation of DRI-GARD CP 700 is recommended as a water repellent primer.
- On fair faced and precast concrete without a levelling pore sealer, bubbles may occur if the application is carried out during rising temperatures.
- The system is fully resistant for all normal atmospheric exposures and rainfall, etc.
- Splashed water containing de-icing salts or sea water may cause a loss of gloss and colour shade variation. However, the protective performances are not adversely affected.
- Existing water-based coating, even well adhering, must be removed completely prior to applying DRI-GARD CF 900.

MIXING

DRI-GARD CF 900 is supplied ready to use. Stir thoroughly prior to application. In difficult painting conditions, such as very low or very high temperatures, up to 5% of thinner can be added.

HEALTH & SAFETY

For information and advice on the safe handling, storage and disposal of chemical products, users shall refer to the most recent Material Safety Data Sheet containing physical, ecological, toxicological and other safety-related data.

LEGAL NOTE

The information, and, in particular, the recommendations relating to the application and end-use of these products, are given in good faith based on current knowledge and experience of the products when properly stored, handled and applied under normal conditions in accordance to the manufacturer recommendations. In practice, the differences in materials, substrates and actual site conditions are such that no warranty in respect of merchantability or of fitness for a particular purpose, nor any liability arising out of any legal relationship whatsoever, can be inferred either from this information, or from any written recommendations, or from any other advice offered. The user of the product must test the product's suitability for the intended application and purpose. The manufacturer reserves the right to change the properties of its products. The proprietary rights of third parties must be observed. All orders are accepted subject to our current terms of sale and delivery. Users must always refer to the most recent issue of the local Product Data Sheet for the product concerned, copies of which will be supplied on request.

