

## Cleargard

### High Performance Anti-graffiti Coating

#### Description

A sacrificial, environmentally friendly, waterborne, two component polyurethane coating, based on polyol dispersions which exceed the performance levels of typical solvent based systems. Cleargard offers excellent UV stability and is resistant to solvent cleaners. It also contains a siloxane additive which provides outstanding hydro and oleophobic properties allowing easy removal of most felt tipped markers and paints, without affecting the substrate material.


Cleargard is a high performance anti-graffiti coating for concrete and brickwork, designed to overcome the problems associated with solvent borne systems. The coating provides a clear gloss finish and can be applied directly onto the substrate or can be used as a protective overcoat to existing paint finishes.

#### Advantages

- Environmentally friendly.
- Non-flammable, low odour formulation.
- Economical in use and equipment may be cleaned with water.
- High performance, equal or better than solvent based systems.
- Easily applied by brush or roller.
- Versatile, apply as an overcoat to existing finishes or directly onto concrete, brick, block or timber.
- Conforms to EN1504 Part 2.

#### Technical Information

|                                       |                         |
|---------------------------------------|-------------------------|
| Coverage                              | 5 m <sup>2</sup> per kg |
| Drying Time                           | 2-6 Hours               |
| Application Temperature               | 5°C to 35°C             |
| Solvent Resistance (ASTM D4752)       |                         |
| MEK                                   | >200 Double Rubs        |
| Toluene                               | >200 Double Rubs        |
| Isopropanol                           | 200 Double Rubs         |
| Accelerated Weathering 1000 Hrs QUV-A |                         |
| Gloss Retention (ASTM G53)            | 99%                     |
| Delta E (ATSM E1455)                  | 2.5                     |
| Salt Spray - Blister (ASTM B117)      | 10                      |

|   |                   |
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| Nufins, Kingston House,<br>3 Walton Road, Pattinson North, District 15,<br>Washington, Tyne & Wear. NE38 8QA<br>13<br>0086-CPD-594215 |                   |
| EN 1504-2<br>Surface protection product<br>Coating  |                   |
| Chemical Resistance   |                   |
| Hydrochloric acid   | No visual defects |
| Sulphuric acid  | No visual defects |
| Adhesion - concrete   | >1.0 MPa          |
| Dangerous substances  | Comply with 5.3   |

#### Surface Preparation

All surfaces should be clean and free from all contaminants. Concrete substrates should be over 28 days old with a moisture content less than 6%. Should the strength or the surface stability of the concrete base be in doubt, we would recommend that a trial patch of Cleargard be applied to assess its suitability.

#### Mixing

Mix slowly to avoid entraining air. Empty the entire contents of the hardener tin into the base tin and mix using a variable speed drill and spiral whisk until homogenous.



## Technical properties of Cleargard.

| Properties   | Standard   | Performance Requirement | Declared Value  |
|--|--|-------------------------|---|
| Appearance   |  |                         | Opaque liquid   |
| Coverage   |  |                         | 5m <sup>2</sup> /kg                                     |
| Usable life  |  |                         | 1 hour  |
| Dry film thickness (1 coat)  |  |                         | 77µm  |
| Drying time;<br>Set to touch<br>Tack free<br>Full cure   | ASTM D1640   |                         | 2.5 hours<br>4 hours<br>6 hours                         |
| S.G.   |  |                         | 1.07  |
| Total solids   |  |                         | 48%   |
| Application temperature  |  |                         | 5°C to 35°C   |
| Specular gloss;<br>20° angle<br>60° angle  | ASTM D523  |                         | 89<br>95  |
| Adhesion;<br>Dry tape<br>Dry scrape<br>Wet tape (24 hours/21°C)<br>Wet tape (4 days/21°C)                        | ASTM D3359<br>ASTM D2197<br>ASTM D3359<br>ASTM D3359 |                         | 5A<br>>6kg<br>5A<br>5A                                  |
| Adhesion - concrete  | EN1542   | >1.0 MPa                | >1.0 MPa  |
| Flexibility; O-T bend  | ASTM D4145-90  |                         | Pass  |
| Impact resistance;<br>Direct<br>Reverse  | ASTM D2794   |                         | >160 in-lbs<br>>160 in-lbs                              |
| Hardness;<br>Pencil<br>Pendulum  | ASTM D3363<br>ASTM D4366                             |                         | 2H<br>220   |
| Chemical resistance;<br>(7 Days exposure)<br>Hydrochloric acid (10%)<br>Sulphuric acid (10%)<br>Nitric acid (5%) | EN ISO 2812-1<br>ASTM D1308                          |                         | No effect<br>No effect<br>Very slight discolouration    |
| Solvent resistance;<br>MEK<br>Toluene<br>Isopropanol   | ASTM D4752   |                         | >200 Double rubs<br>>200 Double rubs<br>200 Double rubs |
| Artificial weathering<br>1000 hours QUV-A<br>Gloss retention<br>Delta E  | ASTM G53<br>ASTM E1455                               |                         | 99%<br>2.5  |
| Salt spray<br>Blister (field)  | ASTM B117  |                         | 10  |

Technical data shown are statistical results and do not correspond to guaranteed minima.

Tolerances are those described in appropriate performance standards.



## Application Instructions

Cleargard should be applied at the correct coverage rate using a brush, applicator or roller. Thinning with water should not be necessary. One coat is normally sufficient however when applied on very porous surfaces or where a high build is required a second coat may be applied by brush, roller or spray onto the prepared surface. If required the second coat must be applied whilst the first coat is still tacky (within 4 hours) to avoid problems with intercoat adhesion. Clean all equipment immediately after use with clean water.

For spray application contact our technical department.

## Packaging

Cleargard is available in 5 kg and 20kg units.

## Storage

Material should be stored at room temperature, protected from frost and kept out of the reach of children.

Store away from food stuffs and out of the reach of children.

## Health & Safety

Product Safety Data Sheets (SDS) are available from Nufins. SDS sheets are provided to help customers satisfy their safe handling, use and disposal needs as well as assist with any conformance requirements made locally by health and safety regulations.

SDS are continually updated to provide the very latest Information to our customers. We therefore recommend contacting our head office to obtain the most recent and accurate SDS before handling and using any product.

## Limitations

Do not use where concrete is to be submerged under water. Do not apply at temperatures below 5°C or when rain is expected.

When applied direct to concrete, as with all resinous systems, Cleargard may affect the appearance of the concrete. Therefore we would recommend a trial panel is coated to approve the system.

## Technical Support

Through our technical department and laboratories we can offer a comprehensive service to specifiers and contractors. Technical contacts are available to provide further information and arrange demonstrations.

