SURFACESHIELD™ HD
Non-Sacrificial Anti-Graffiti Surface Treatment
PC 952

FEATURES
- Protects concrete, brick, natural stone and other porous masonry surfaces
- Barrier against both water based and oily stains and most types of graffiti
- Allows fast and cost effective removal of graffiti
- Vapor permeable film
- Invisible – does not change the appearance of the original surface

USES
Surfaceshield™ HD (Heavy Duty) is a water-based solution for the protection of surfaces from graffiti, spills and pollution. The low VOC formula is suitable where low odour and low solvent emissions are desired. Surfaceshield™ HD is a non-sacrificial coating allowing repeated cleaning after one application. Surfaceshield™ HD is non-film-forming; it penetrates the porous surface providing an invisible hydrophobic and oleophobic layer. Graffiti and most other contaminants on surfaces treated with Surfaceshield™ HD can be removed using a combination of graffiti removal agents and hot water pressure. Surfaceshield™ HD can be used to protect a wide variety of porous materials used in construction, infrastructure, retail, municipality, and public spaces.

TYPICAL PROPERTIES AND APPLICATION DATA

<table>
<thead>
<tr>
<th>CLASSIFICATION</th>
<th>Waterborne co-polymer</th>
<th>APPLICATION CONDITIONS</th>
</tr>
</thead>
<tbody>
<tr>
<td>COLOUR</td>
<td>Clear colourless</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>COMPONENTS</th>
<th>One</th>
<th>FILM THICKNESS (MICRONS)</th>
</tr>
</thead>
<tbody>
<tr>
<td>VOLUME SOLIDS</td>
<td>Not applicable</td>
<td>Min</td>
</tr>
<tr>
<td>VOC LEVEL</td>
<td>&lt;1 g/L</td>
<td>Max</td>
</tr>
<tr>
<td>FLASH POINT</td>
<td>Non flammable</td>
<td>Recommended</td>
</tr>
<tr>
<td>POT LIFE</td>
<td>Not applicable</td>
<td></td>
</tr>
<tr>
<td>MIXING RATIO V/V</td>
<td>Single Pack</td>
<td></td>
</tr>
<tr>
<td>THINNER</td>
<td>Do not thin</td>
<td></td>
</tr>
<tr>
<td>PRODUCT CODE</td>
<td>992-H0049 Surfaceshield™ HD</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>SUITABLE SUBSTRATES</th>
<th>SUITABLE TOPCOATS</th>
<th>APPLICATION METHODS</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Surfaceshield™ S is suitable for vertical surfaces. Refer to Dulux.</td>
<td>Conventional, airless spray or air assisted spray, using low pressure.</td>
</tr>
</tbody>
</table>

DRIED CHARACTERISTICS

<table>
<thead>
<tr>
<th>Temperature</th>
<th>Humidity</th>
<th>Full Cure</th>
<th>OVERCOT</th>
</tr>
</thead>
<tbody>
<tr>
<td>25° C</td>
<td>50%</td>
<td>7 Days</td>
<td>Min</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Max*</td>
</tr>
</tbody>
</table>

These figures are a guide only, as ventilation, film thickness, humidity, thinning and other factors will influence the rate of drying.

PROCEDURE

PREPARATION AND APPLICATION
1. The surface must be free from contaminants including grease, oil, dirt, bond breakers, previous coatings, sealers, and loosely adhering materials. An industrial detergent and hot water high-pressure cleaning may be required for persistent deposits. Soft and easily damaged substrates, such as limestone and some sandstone, may require specialized preparation prior to treatment with Surfaceshield. Refer to your Dulux Protective Coatings Specifications Consultant for specific advice.
2. Concrete should be fully cured. Application over strongly alkaline surfaces (such as new concrete) will affect the performance of Surfaceshield™ HD.
3. The surface can be either dry or damp before applying Surfaceshield™ HD.
4. Apply one or two layers of Surfaceshield™ HD to the surface being protected using low pressure spray. The amount of Surfaceshield™ HD required will increase with increasing porosity of the surface being coated. Subsequent layers can be applied when the coating becomes hand dry. Once allowed to fully dry no further material can be added. Refer to the recommended system guide for a rough indication of the spreading rates required for the surface to be protected. Insufficient application of Surfaceshield™ HD will dramatically affect its performance and ability to protect the substrate.
5. If Surfaceshield™ S is to be applied for sacrificial protection, allow the Surfaceshield™ HD to dry for 24 hours prior to the application of the Surfaceshield™ S.

IMPORTANT NOTE: This product is to be applied by a specialist applicator suitably trained in the application of Surfaceshield™ HD and the removal of graffiti according to Surfaceshield™ guidelines. The applicator is required to record application works and be able to remove graffiti from affected areas using the correct Surfaceshield procedure. Deviation from this requirement may adversely affect graffiti management.

SPREADING RATE
3 – 5 square metres per litre in 1 – 2 passes

NOTE: Practical spreading rates will vary depending on such factors as application method, ambient conditions and surface roughness.
SURFACESHIELD™ HD

TYPICAL SYSTEMS

This is a guide only and not to be used as a specification. Your specific project needs must be discussed with a Dulux Protective Coatings Consultant.

<table>
<thead>
<tr>
<th>SURFACE</th>
<th>ENVIRONMENT</th>
<th>PREPARATION GUIDE</th>
<th>SYSTEM</th>
<th>PASSES REQUIRED</th>
<th>COVERAGE (m²/L)</th>
</tr>
</thead>
<tbody>
<tr>
<td>SMOOTH (Precast concrete)</td>
<td>Exterior</td>
<td>Clean and degrease surface to remove contaminants, including bond breakers</td>
<td>1st Coat</td>
<td>Surfaceshield™ HD</td>
<td>1 – 2 passes*</td>
</tr>
<tr>
<td>POROUS (clay bricks, natural stone, concrete)</td>
<td>Exterior</td>
<td>Clean and degrease surface to remove contaminants</td>
<td>1st Coat</td>
<td>Surfaceshield™ HD</td>
<td>1 – 2 passes*</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>2nd Coat</td>
<td>Surfaceshield™ HD</td>
<td>1 pass</td>
</tr>
<tr>
<td>VERY POROUS (Sandstone)</td>
<td>Exterior</td>
<td>Clean and degrease surface to remove contaminants</td>
<td>1st Coat</td>
<td>Surfaceshield™ HD</td>
<td>1 – 2 passes*</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>2nd Coat</td>
<td>Surfaceshield™ HD</td>
<td>1 pass</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>3rd Coat</td>
<td>Surfaceshield™ HD</td>
<td>1 pass</td>
</tr>
</tbody>
</table>

*Multiple passes must be applied wet on wet

SURFACE PREPARATION

Concrete: Concrete must be at least 28 days old before coating. Remove curing compounds, oil, grease and other only contaminants with Gamilen CA 1 (according to the manufacturer’s written instructions and all safety warnings). Remove all laitance and loose material. Fill any large cracks or voids using Luxeepoxy® Filler. Any pre-existing coatings or contaminants will reduce the effectiveness of Surfaceshield™ HD.

APPLICATION

BRUSH/ROLLER
Suitable for small areas only. Apply even coats of the material to the prepared surface.

CONVENTIONAL SPRAY
Apply in multiple wet coats overlapping each pass 50%.

AIRLESS SPRAY
Standard airless spray equipment. Tips between 0.17mm and 0.21mm are suggested to avoid excess material being applied. Avoid flooding the surface.

PRECAUTIONS

Surfaceshield™ HD is an industrial product designed for use by experienced Protective Coating applicators. Where conditions may require variation from the quoted instructions on this Project Information Sheet contact your nearest Dulux® Consultant for advice prior to painting. Do not apply in conditions outside the parameters stated in this document without the written consent of Dulux® Australia. Do not apply at temperatures below 10°C. Where multiple passes are required the product must be applied wet on wet. Excessively rapid drying can limit product effectiveness. Soft and easily damaged substrates, such as Limestone and some Sandstone, may require specialized preparation prior to treatment with Surfaceshield. Do not apply in conditions outside those recommended on this data sheet. Dulux® cannot guarantee that every type of graffiti can be completely removed. This technology may not be able to protect against graffiti agents which etch, or otherwise damage the substrate. Highest protection is achieved after 7 days of curing. Do not use this product for this application without reference to a Dulux® Protective Coatings project-specific specification.

CLEAN UP

Clean all equipment with warm water and biodegradable waterbased detergent or degreaser after use.

CLEANING AND GRAFFITI REMOVAL

A combination of graffiti removal agents and hot water power washing is the most effective and fastest cleaning method. When power washing, a continuous flow of hot water (>75°C) on board water heater is recommended. Use a minimum 45° angle flat spray tip. Spray power should not exceed 65 bar and a spray distance of 10cm should be maintained. Avoid higher pressure water washing as this causes abrasion and may compromise the protective treatment.

OVERCOATING

The surface must be free of oil, grease and other contaminants. High-pressure water wash at 8.3 to 10.3 MPa (1,200 – 1,500 p.s.i.) to remove loosely adhering chalk and dust. Abrasion may be required depending on surface condition. Thorough abrasion will be required to remove existing Surfaceshield™ HD before reaplication.

SAFETY PRECAUTIONS

Read Data Sheet, SAFETY DATA SHEET and any precautions on container labels. SAFETY DATA SHEET is available from Customer Service (13 23 77) or www.duluxprotectivecoatings.com.au

STORAGE

Store in a well-ventilated area. Keep containers closed at all times.

HANDLING

As with any chemical, ingestion, inhalation and prolonged or repeated skin contact should be avoided by good occupational work practice. Eye protection approved to AS1337 should be worn where there is a risk of splashes entering the eyes. Always wash hands before smoking, eating, drinking or using the toilet.

FLAMMABILITY

This product is non-flammable.

COMPANY INFORMATION

Dulux Protective Coatings a division of DuluxGroup (Australia) Pty Ltd DuluxGroup (New Zealand) Pty Ltd 1956 Dandenong Road, Clayton 3168 150 Hutt Park Road, Lower Hutt, NZ A.B.N. 67 000 049 427 A.B.N. 55 133 404 118

PACKAGING, TRANSPORT AND STORAGE

PACKAGING

Available in 20 litre packs and 1000 litre bulk containers.

TRANSPORTATION WEIGHT

1.01 kg/litre

DANGEROUS GOODS

Non Dangerous Goods

Surfaceshield is a trade mark.

Any advice, recommendation, information, assistance or service provided by Dulux Australia in relation to goods manufactured by it or their use and application is given in good faith and is believed by Dulux to be appropriate and reliable. However, any advice, recommendation, information, assistance or service provided by Dulux is provided without liability or responsibility PROVIDED THAT the foregoing shall not exclude, limit, restrict or modify the right entitlements and remedies conferred upon any person or the liabilities imposed upon Dulux by any condition or warranty implied by Commonwealth, State or Territory Act or ordinance void or prohibiting such exclusion limitation or modification. Products can be expected to perform as indicated in this sheet so long as applications and application procedures are as recommended. Specific advice should be sought from Dulux for application in highly corrosive areas and for large projects to ensure proper performance.