

# 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
  - VAPOUR 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

<b>CLASSIFICATION</b>	Waterborne co-polymer	<b>APPLICATION CONDITIONS</b>			
<b>FINISH</b>	Invisible		Min	Max	
<b>COLOUR</b>	Clear colourless	<b>Air Temp.</b>	5°C	30°C	
		<b>Substrate Temp.</b>	5°C	30°C	
		<b>Relative Humidity</b>	40%	85%	
<b>COMPONENTS</b>	One	<b>FILM THICKNESS (MICRONS)</b>			
<b>VOLUME SOLIDS</b>	Not applicable		Min	Max	Recommended
<b>VOC LEVEL</b>	<1 g/L	<b>Wet film per coat (µm)</b>	Not applicable. Refer to typical systems guide for spreading rate		
<b>FLASH POINT</b>	Non flammable	<b>Dry film per coat (µm)</b>	Not applicable. Refer to typical systems guide for spreading rate		
<b>POT LIFE</b>	Not applicable	<b>SUITABLE SUBSTRATES</b>	Concrete, bricks, natural stone and other porous masonry surfaces		
<b>MIXING RATIO V/V</b>	Single Pack	<b>SUITABLE TOPCOATS</b>	Surfaceshield™ S is suitable for vertical surfaces. Refer to Dulux.		
<b>THINNER</b>	Do not thin	<b>APPLICATION METHODS</b>	Conventional, airless spray or air assisted spray, using low pressure.		
<b>PRODUCT CODE</b>	992-H0049 Surfaceshield™ HD				

### DRYING CHARACTERISTICS

Temperature	Humidity	Full Cure	OVERCOAT	
			Min	Max*
25° C	50%	7 Days	24 Hours	Extended

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 alkali 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

assuming no losses

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.

SURFACE	ENVIRONMENT	PREPARATION GUIDE	SYSTEM		PASSES REQUIRED	COVERAGE (m <sup>2</sup> /L)
SMOOTH (Precast concrete)	Exterior	Clean and degrease surface to remove contaminants, including bond breakers	1 <sup>st</sup> Coat	Surfaceshield™ HD	1 – 2 passes*	5
POROUS (clay bricks, natural stone, concrete)	Exterior	Clean and degrease surface to remove contaminants	1 <sup>st</sup> Coat	Surfaceshield™ HD	1 – 2 passes*	4
			1 <sup>st</sup> Coat	Surfaceshield™ HD	1 – 2 passes*	4
			2 <sup>nd</sup> Coat	Surfaceshield™ S	1 pass	3 – 4
VERY POROUS (Sandstone)	Exterior	Clean and degrease surface to remove contaminants	1 <sup>st</sup> Coat	Surfaceshield™ HD	1 – 2 passes*	3 – 4
			2 <sup>nd</sup> Coat	Surfaceshield™ S	1 pass	2 – 3
			3 <sup>rd</sup> Coat	Surfaceshield™ S	1 pass	2 – 3

\*Multiple passes must be applied wet on wet

<b>SURFACE PREPARATION</b>	<b>Concrete:</b> Concrete must be at least 28 days old before coating. Remove curing compounds, oil, grease and other oily contaminants with Gamlen 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 Luxepoxy® Filler. Any pre-existing coatings or contaminants will reduce the effectiveness of Surfaceshield™ HD.
<b>APPLICATION</b>	Mix thoroughly using a power mixer until the contents are uniform.
<b>BRUSH/ROLLER</b>	Suitable for small areas only. Apply even coats of the material to the prepared surface.
<b>CONVENTIONAL SPRAY</b>	Apply in multiple wet coats overlapping each pass 50%.
<b>AIRLESS SPRAY</b>	Standard airless spray equipment. Tips between 0.17mm and 0.21mm are suggested to avoid excess material being applied. Avoid flooding the surface.
<b>PRECAUTIONS</b>	Surface shield™ HD is an industrial product designed for use by experienced Protective Coating applicators. Where conditions may require variation from the recommendations on this Product Data 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. <b>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.</b> 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.
<b>CLEAN UP</b>	Clean all equipment with warm water and biodegradable waterbased detergent or degreaser after use.
<b>CLEANING AND GRAFFITI REMOVAL</b>	A combination of <b>graffiti removal agents</b> 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.
<b>OVERCOATING</b>	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 reapplication.
<b>SAFETY PRECAUTIONS</b>	<b>Read Data Sheet, SAFETY DATA SHEET and any precautions on container labels. SAFETY DATA SHEET is available from Customer Service (13 23 77) or <a href="http://www.duluxprotectivecoatings.com.au">www.duluxprotectivecoatings.com.au</a></b>
<b>STORAGE</b>	Store in a well-ventilated area. Keep containers closed at all times.
<b>HANDLING</b>	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.
<b>USING</b>	Use with good ventilation and avoid inhalation of spray mists and fumes. If risk of inhalation of spray mists exists, wear combined organic vapour/particulate respirator. When spraying, users must comply with their respective State Spray Painting regulations.
<b>FLAMMABILITY</b>	This product is non flammable.

COMPANY INFORMATION		PACKAGING, TRANSPORT AND STORAGE	
Dulux Protective Coatings a division of		<b>PACKAGING</b>	Available in 20 litre packs and 1000 litre bulk containers.
DuluxGroup (Australia) Pty Ltd 1956 Dandenong Road, Clayton 3168 A.B.N. 67 000 049 427	DuluxGroup (New Zealand) Pty Ltd 150 Hutt Park Road, Lower Hutt, NZ A.B.N. 55 133 404 118	<b>TRANSPORTATION WEIGHT</b>	1.01 kg/litre
		<b>DANGEROUS GOODS</b>	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.