

WEATHERMAX[®] HBR

High Build Recoatable Gloss Polyurethane

PC 405

- FEATURES**
- EXCELLENT HIGH BUILD BRUSH & ROLLER APPLICATION
 - SUPERIOR GLOSS & COLOUR RETENTION
 - CAN BE APPLIED UP TO 125 MICRONS DFT IN A SINGLE COAT VIA SPRAY APPLICATION
 - GOOD CHEMICAL & ABRASION RESISTANCE
 - TINTABLE - AVAILABLE IN OVER 5000 COLOURS
 - ACCELERATOR AVAILABLE FOR USE IN COOLER CONDITIONS
 - AVAILABLE IN MICACEOUS IRON OXIDE FINISH

USES WEATHERMAX[®] HBR has been locally developed for high build roller or brush application. It is a high build recoatable polyurethane coating designed to be used over a wide range of suitably primed substrates such as mild steel, galvanised steel, concrete and aluminium.

WEATHERMAX[®] HBR is a high performance coating that exhibits excellent gloss and colour retention during extended service periods in severe industrial and marine environments.

Tested in accordance with AS4548.5 Appendix C & D for use as a concrete anti-carbonation coating system when used with Durebild[®] STE.

SPECIFICATIONS AS/NZS 3750.6

RESISTANCE GUIDE

HEAT RESISTANCE	Up to 120°C dry heat.	ALKALIS	Good resistance to splash and spillage of most common alkalis. Aluminium containing colours are not recommended for alkaline conditions.
WEATHERABILITY	Excellent gloss and colour retention on exterior exposure.	SALTS	Unaffected by splash and spillage of neutral and alkaline salt solutions.
SOLVENTS	Resists splash and spillage of most hydrocarbon solvents, refined petroleum products and most common alcohols.	WATER	Excellent resistance to fresh and salt water but not suitable for immersion.
ACIDS	Preferred coating for splash and spillage of most acids. Aluminium containing colours are not recommended for acidic conditions.	ABRASION	Good when fully cured.

TYPICAL PROPERTIES AND APPLICATION DATA

CLASSIFICATION	Acrylic polyurethane coating		APPLICATION CONDITIONS												
FINISH	Gloss														
COLOUR	White, LF Golden Yellow, LF Signal Red, Black, MIO Mid Grey, a full range of tinted colours and MTO factory made colours.		REFER TO PAGE 2												
COMPONENTS	Two (Three, when using Accelerator)														
SOLIDS BY VOLUME	REFER TO PAGE 2		<table border="1"> <thead> <tr> <th></th> <th>Min</th> <th>Max</th> <th>Recom.</th> </tr> </thead> <tbody> <tr> <td>Wet film per coat (microns)</td> <td colspan="3">REFER TO PAGE 2</td> </tr> <tr> <td>Dry film per coat (microns)</td> <td colspan="3">REFER TO PAGE 2</td> </tr> </tbody> </table>		Min	Max	Recom.	Wet film per coat (microns)	REFER TO PAGE 2			Dry film per coat (microns)	REFER TO PAGE 2		
	Min	Max		Recom.											
Wet film per coat (microns)	REFER TO PAGE 2														
Dry film per coat (microns)	REFER TO PAGE 2														
VOC LEVEL	REFER TO PAGE 2														
FLASH POINT	16°C														
POT LIFE	REFER TO PAGE 2														
MIXING RATIO (V/V)	Part A : 4	Part B : 1													
THINNER	965-42166	DUTHIN [®] 040													
PRODUCT CODE	770-00026	White													
	770-39141	LF Golden Yellow													
	770-50568	Black													
	770-39079	LF Signal Red													
	770-63001	Light Base													
	770-63002	Deep Base													
	770-63003	Clear Base													
	770-63006	MIO Mid Grey													
	770-63095	MIO Natural Grey													
	976-84593	Standard Hardener													
	976-89935	Accelerator Part C													
		SUITABLE SUBSTRATES	Suitably primed steel, aluminium, zinc coated steel, concrete, polyester composite or MDF.												
		APPLICATION METHODS	Brush, roller, conventional, airless spray or air assisted spray.												

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Standard Hardener						
COATING THICKNESS			APPLICATION CONDITIONS			
	Min	Max	Recom.		Min	Max
Wet film per coat (microns)	110	180	145	Air Temperature	10°C	45°C
Dry film per coat (microns)	75	125	100	Substrate Surface Temperature	10°C	45°C
				Relative Humidity		85%
SOLIDS BY VOLUME	70% (White)			POT LIFE	2 Hours (4L, 25°C)	
VOC LEVEL	<280 g/L (White)					
Drying characteristics at 100 microns dry film thickness						
Temperature	Humidity	Touch	Handle	Full Cure	Min	Overcoat Max
25° C	50%	3 Hours	10 Hours	7 Days	10 Hours	Indefinite
15° C	50%	10 Hours	25 Hours	7 Days	25 Hours	Indefinite
TYPICAL SPREADING RATE AT RECOMMENDED DRY FILM BUILD				A spreading rate of 7 sq. metres per litre corresponds to 100 microns dry film thickness assuming no losses. Practical spreading rates will vary depending on such factors as method and conditions of application and surface roughness.		

Standard Hardener with Accelerator (Part C) (NOTE – Use only 1 dose per 4 litre Kit)						
COATING THICKNESS			APPLICATION CONDITIONS			
	Min	Max	Recom.		Min	Max
Wet film per coat (microns)	110	185	150	Air Temperature	5°C	45°C
Dry film per coat (microns)	75	125	100	Substrate Surface Temperature	5°C	45°C
				Relative Humidity		85%
SOLIDS BY VOLUME	68% (White)			POT LIFE	2 Hours (4L, 25°C)	
VOC LEVEL	<300 g/L (White)					
Drying characteristics at 100 microns dry film thickness						
Temperature	Humidity	Touch	Handle	Full Cure	Min	Overcoat Max
25° C	50%	2 Hours	5 hours	7 Days	5 hours	Indefinite
10° C	50%	7 Hours	18 Hours	7 days	18 Hours	Indefinite
TYPICAL SPREADING RATE AT RECOMMENDED DRY FILM BUILD				A spreading rate of 6.8 sq. metres per litre corresponds to 100 microns dry film thickness assuming no losses. Practical spreading rates will vary depending on such factors as method and conditions of application and surface roughness.		

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

TYPICAL SYSTEMS

(The typical systems are offered as a guide only and are not to be used as a specification. It is recommended that the specific needs of a project be discussed with a Dulux Protective Coatings Consultant.)

SURFACE	PREPARATION GUIDE	SYSTEM		DRY FILM THICKNESS
STEEL New Construction	Abrasive blast AS1627.4 Class 2.5	1st Coat	DUREPON® P14	75 Microns
		2nd Coat	WEATHERMAX® HBR	100 Microns
		1st Coat	ZINCANODE® 402	75 Microns
		2nd Coat	DUREMAX® GPE	100 Microns
		3rd Coat	WEATHERMAX® HBR	100 Microns
STEEL Maintenance	Hand tool clean AS1627.7 Class 2 Power tool clean AS1627.2 Class 2	1st Coat	DUREBILD® STE	125 Microns
		2nd Coat	WEATHERMAX® HBR	100 Microns
CONCRETE	Clean surface to remove contaminants. Diamond grind, track or light-shot blast. Remove dust.	1st Coat	LUXEPOXY® 4 White Primer	50 Microns
		2nd Coat	WEATHERMAX® HBR	100 Microns
GALVANISED	Clean, degrease and abrade surface	1st Coat	DUREMAX® GPE ZP	150 Microns
		2nd Coat	WEATHERMAX® HBR	100 Microns

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SURFACE PREPARATION	It is recommended that specifiers follow the guidelines for surface preparation from the data sheet for the primer selected. The primer surface must be free from grease, oil, dirt and other loosely adhering materials.
APPLICATION	Stir each can thoroughly until the contents are uniform. Use of a power mixer is recommended. Ensure bases have been tinted to the correct colour before use – DULUX ASSUMES NO RESPONSIBILITY FOR THE APPLICATION OF AN INCORRECT COLOUR. Mix the contents of both packs together thoroughly using a power mixer and allow to stand for 10 minutes. If Weathermax® HBR Accelerator (Part C) is to be used it should be added under power mixing after the Part A and Part B have been combined. Use one dose only per 4 Litre kit. Box all containers before use to ensure colour consistency. Remix thoroughly before using.
BRUSH/ROLLER	Apply even coats of the mixed material to the prepared surface. Thin if necessary with up to 50 ml/litre with DUTHIN® 040 (965-42166) to ease application. When brushing and rolling additional coats may be required to attain the specified thickness. Note - If a highly decorative appearance is required it may be necessary to adjust thinning levels (up to 100 – 150ml/litre), roller type and application technique.
CONVENTIONAL SPRAY	Thin up to 100 ml/litre with DUTHIN® 040 (965-42166) to aid atomisation. <u>Typical Set-up</u> Graco Delta Gun: 1.8mm (239543) Pressure at Pot: 65-100 kPa (10-15 p.s.i.) Pressure at Gun: 385-420 kPa (55-60 p.s.i.)
AIRLESS SPRAY	Standard airless spray equipment such as a Graco 45:1 Xtreme with a fluid tip of 15-19 thou (0.38-0.48mm) and an air supply capable of delivering 550-690 kPa (80-100 p.s.i.) at the pump. Thinning is not normally required but up to 50 ml/litre of DUTHIN® 040 (965-42166) may be added to ease application.
PRECAUTIONS	This 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® representative for advice prior to painting. Do not apply in conditions outside the parameters stated in this document without the express written consent of Dulux® Australia. Freshly mixed material must not be added to material that has been mixed for some time. The rate of cure is dependent upon temperature. Do not apply at temperatures below 10°C. Do not apply at relative humidity above 85% or when the surface is less than 3°C above the dewpoint. Ensure that you read and understand the safety precautions on the Material Safety Data Sheets for the two components before using. The recommended thinner MUST be used as some solvents react with the isocyanate hardener seriously degrading the life of the coating. Under no circumstances should water or non-recommended thinner be allowed to contaminate the product. To minimize variations in gloss and appearance on a structure or item it is recommended that Weathermax Accelerator is used uniformly or not at all, ie do not do half with the Accelerator and half without it. This may result in a slight difference in appearance and gloss. Note - The Weathermax HBR Accelerator will substantially speed up handle and dry times when used within the allowable temperature ranges quoted above. However if lower than recommended application and substrate temperatures are experienced during curing it may lead to solvent entrapment and low gloss due to the effects of condensation/dew. Coatings containing micaceous iron oxide (MIO) are prone to marring but this will not affect the protective properties. With MIO coatings colour variations will occur due to different application techniques.
CLEAN UP	Clean all equipment with DUTHIN® 040 (965-42166) immediately after use.
OVERCOATING	Aged coating should be tested for lifting by a method appropriate for the coating thickness, for example 'X' cut or cross-hatch methods. If it lifts, remove it. 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.
SAFETY PRECAUTIONS	Read Data Sheet, Safety Data Sheet and any precautionary labels on containers.
STORAGE	Store as required for a flammable liquid Class 3 in a bunded area under cover. Store in well-ventilated area away from sources of heat or ignition. 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. Gas is evolved when isocyanate in the hardener reacts with water. If a closed container shows signs of internal pressure, cover it completely with a cloth and remove the lid slowly to prevent splashing or violent expulsion of the lid.
USING	Use with good ventilation and avoid inhalation of spray mists and fumes. If risk of inhalation of spray mists exists, wear a positive-pressure, air-supplied respirator. When spray painting, users should comply with the provisions of the respective State Spray Painting Regulations.
FLAMMABILITY	This product is flammable. All sources of ignition must be eliminated in, or near the working area. DO NOT SMOKE.
WELDING	Fight fire with foam, CO ₂ or dry chemical powder. On burning will emit toxic fumes. Avoid inhalation of fumes if welding surfaces coated with this paint. Grind off coating before welding.

**SAFETY DATA SHEET is available from Dulux Customer Service (Australia 132 377 or New Zealand 0800 800 424)
www.duluxprotectivecoatings.com.au**

Dulux Protective Coatings a division of		PACKAGING	Available in 4 litre and 20 litre packs
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	TRANSPORTATION WEIGHT	1.43 kg/litre (Average of components)
Dulux, Zincanode, Durebild, Weathermax, Duremax, Durepon, Duthin and Luxepoxy are registered trade marks of DuluxGroup (Australia) Pty Ltd.		DANGEROUS GOODS	Part A: Class 3 UN 1263 Part B: Class 3 UN 1263 Part C: Class 3 UN 1263

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