

# WEATHERMAX<sup>®</sup> 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

**USES** WEATHERMAX<sup>®</sup> 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<sup>®</sup> HBR is a high performance coating that exhibits excellent gloss and colour retention during extended service periods in severe industrial and marine environments.

**SPECIFICATIONS** AS/NZS 3750.6

## RESISTANCE GUIDE

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

## TYPICAL PROPERTIES AND APPLICATION DATA

<b>CLASSIFICATION</b>	Acrylic polyurethane coating	<b>APPLICATION CONDITIONS</b>	
<b>FINISH</b>	Gloss		
<b>COLOUR</b>	White, LF Golden Yellow, LF Signal Red, Black, MTO factory made colours and a full range of tinted colours		<b>REFER TO PAGE 2</b>
<b>COMPONENTS</b>	Two (Three, when using Accelerator)		
<b>SOLIDS BY VOLUME</b>	<b>REFER TO PAGE 2</b>		
<b>VOC LEVEL</b>	<b>REFER TO PAGE 2</b>		
<b>FLASH POINT</b>	16°C		
<b>POT LIFE</b>	<b>REFER TO PAGE 2</b>		
<b>MIXING RATIO (V/V)</b>	Part A : 4      Part B : 1		
<b>THINNER</b>	965-42166      DUTHIN <sup>®</sup> 040		
<b>PRODUCT CODE</b>	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 976-84593      Standard Hardener 976-89935      Accelerator Part C	<b>SUITABLE SUBSTRATES</b>	Suitably primed steel, aluminium, zinc coated steel, concrete, polyester composite or MDF.
		<b>APPLICATION METHODS</b>	Brush, roller, conventional, airless spray or air assisted spray.

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Standard Hardener						
<b>COATING THICKNESS</b>			<b>APPLICATION CONDITIONS</b>			
	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%
<b>SOLIDS BY VOLUME</b>	70% (White)			<b>POT LIFE</b>	2 Hours (4L, 25°C)	
<b>VOC LEVEL</b>	<280 g/L (White)					
<b>Drying characteristics at 100 microns dry film thickness</b>						
<b>Temperature</b>	<b>Humidity</b>	<b>Touch</b>	<b>Handle</b>	<b>Full Cure</b>	<b>Min</b>	<b>Overcoat Max</b>
25° C	50%	3 Hours	10 Hours	7 Days	10 Hours	Indefinite
<b>TYPICAL SPREADING RATE AT RECOMMENDED DRY FILM BUILD</b>				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)						
<b>COATING THICKNESS</b>			<b>APPLICATION CONDITIONS</b>			
	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%
<b>SOLIDS BY VOLUME</b>	68% (White)			<b>POT LIFE</b>	2 Hours (4L, 25°C)	
<b>VOC LEVEL</b>	<300 g/L (White)					
<b>Drying characteristics at 100 microns dry film thickness</b>						
<b>Temperature</b>	<b>Humidity</b>	<b>Touch</b>	<b>Handle</b>	<b>Full Cure</b>	<b>Min</b>	<b>Overcoat Max</b>
25° C	50%	2 Hours	5 hours	7 Days	5 hours	Indefinite
<b>TYPICAL SPREADING RATE AT RECOMMENDED DRY FILM BUILD</b>				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	Acid etch, or sweep blast. Dust off, wash clean with water and allow to dry.	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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<b>SURFACE PREPARATION</b>	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.
<b>APPLICATION</b>	Stir contents of each can thoroughly with a broad flat stirrer using a stirring, lifting action or use a power mixer. 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. <b>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.</b> Box all containers before use to ensure colour consistency. Remix thoroughly before using.
<b>BRUSH/ROLLER</b>	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.
<b>CONVENTIONAL SPRAY</b>	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.)
<b>AIRLESS SPRAY</b>	Standard airless spray equipment such as a Graco 45:1 Xtreme with a fluid tip of 15-19 thou (0.38-0.48mm) and at a tip pressure of 13.8-20.6 MPa (2,000-3,000 psi). Thinning is not normally required but up to 50 ml/litre of DUTHIN® 040 (965-42166) may be added to ease application.
<b>PRECAUTIONS</b>	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.
<b>CLEAN UP</b>	Clean all equipment with DUTHIN® 040 (965-42166) immediately after use.
<b>OVERCOATING</b>	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.
<b>SAFETY PRECAUTIONS</b>	<b>Read Data Sheet, Material Safety Data Sheet and any precautionary labels on containers.</b>
<b>STORAGE</b>	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.
<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. 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.
<b>USING</b>	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.
<b>FLAMMABILITY</b>	This product is flammable. All sources of ignition must be eliminated in, or near the working area. DO NOT SMOKE. Fight fire with foam, CO <sub>2</sub> or dry chemical powder. On burning will emit toxic fumes.
<b>WELDING</b>	Avoid inhalation of fumes if welding surfaces coated with this paint. Grind off coating before welding.

**MATERIAL SAFETY DATA SHEET is available from Customer Service (132377) or [www.duluxprotectivecoatings.com.au](http://www.duluxprotectivecoatings.com.au)**

Dulux Australia Pty Ltd  
1956 Dandenong Road, Clayton 3168  
A.B.N. 99 004 117 828

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<b>PACKAGING</b>	Available in 4 litre and 20 litre packs
<b>TRANSPORTATION WEIGHT</b>	1.43 kg/litre (Average of components)
<b>DANGEROUS GOODS</b>	Part A: Class 3 UN 1263 Part B: Class 3 UN 1263 Part C: Class 3 UN 1263

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