

# HI TEMP™ UNIPRIME

## Heat Resistant Primer

PC 926

- FEATURES**
- HEAT RESISTANT TO 550°C CONTINUOUS
  - EXCELLENT HEAT QUENCH RESISTANCE
  - COMPATIBLE WITH HI TEMP™ TOPCOATS

**USES** Areas of use include steel boiler stacks, chimneys, steam pipes, furnaces, reaction vessels, etc., which are subject to high heat in industrial atmospheres.

It comes with a catalyst which facilitates air drying at ambient temperature in the event that delays occur before topcoating with HI TEMP™ 400 or 600.

### SPECIFICATIONS

#### RESISTANCE GUIDE

<b>WEATHERABILITY</b>	Will chalk on exterior exposure	<b>SOLVENTS</b>	Good resistance to splash and spillage of most hydrocarbon solvents when fully cured
<b>HEAT RESISTANCE</b>	Up to 550°C dry heat (continuous) Up to 600°C dry heat (intermittent)	<b>WATER</b>	Resists rain and condensation. Not recommended for permanently damp or immersed exposure
<b>SALTS</b>	Unaffected by splash and spillage of neutral salt solutions	<b>ALKALIS</b>	Not recommended where fumes, splash or spillage may occur
<b>ACIDS</b>	Not recommended where fumes, splash or spillage may occur	<b>ABRASION</b>	Good when fully cured

#### TYPICAL PROPERTIES AND APPLICATION DATA

<b>CLASSIFICATION</b>	Silicone heat resistant primer	<b>APPLICATION CONDITIONS</b>			
<b>FINISH</b>	Flat		Min	Max	
<b>COLOUR</b>	Grey	<b>Air Temp.</b>	10°C	45°C	
		<b>Substrate Temp.</b>	10°C	45°C	
		<b>Relative Humidity</b>		85%	
<b>COMPONENTS</b>	One	<b>COATING THICKNESS (MICRONS)</b>			
<b>VOLUME SOLIDS</b>	40%		Min	Max	Recommended
<b>VOC LEVEL</b>	<530 g/L	<b>Wet film per coat (µm)</b>	50	75	65
<b>FLASH POINT</b>	4°C	<b>Dry film per coat (µm)</b>	20	30	25
<b>POT LIFE</b>	24 Hours if catalyst is used	<b>SUITABLE SUBSTRATES</b>	Abrasives blast cleaned steel		
<b>MIXING RATIO</b>	Single Pack (if cured at 250°C – 500°C for 2 hours)	<b>PRIMERS</b>	Not applicable		
<b>WITH CATALYST</b>	Hi Temp™ Catalyst : Hi Temp™ Uniprime 190 g : 4 litre	<b>TOPCOATS</b>	Dulux® Hi Temp™ Finishes		
<b>THINNER</b>	965-63020 Dulux® CR Reducer	<b>APPLICATION METHODS</b>	Brush, roller, conventional, airless spray or air assisted spray		
<b>PRODUCT CODE</b>	950-16185 Hi Temp™ Uniprime includes Catalyst				

#### DRYING CHARACTERISTICS AT 20 µm DRY FILM THICKNESS\*

Temperature	Humidity	Touch	Handle	Full Cure <sup>1</sup>	OVERCOAT	
					Min	Max <sup>2</sup>
25° C	50%	2 Hours	12 Hours	On Heating	12 Hours	Until Heated

#### WITH HI TEMP™ CATALYST\*

Temperature	Humidity	Touch	Handle	Full Cure <sup>1</sup>	OVERCOAT	
					Min	Max <sup>2</sup>
25° C	50%	2 Hours	8 Hours	On Heating	8 Hours	Until Heated

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

<sup>1</sup> Product does not fully harden and develop full protective properties until the surface is heated to 150°C – 200°C for 2 hours

<sup>2</sup> If the maximum overcoat interval is exceeded then the surface MUST be abraded to ensure maximum intercoat adhesion.

#### SPREADING RATE 16 square metres per litre equals 25 µm dry film thickness

ASSUMING NO LOSSES

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

# HI TEMP™ UNIPRIME

## 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	DFT (µm)
STEEL – NEW	150°C – 435°C	Abrasive blast clean AS1627.4 Class 2.0	1 <sup>st</sup> Coat Hi Temp™ Uniprime 2 <sup>nd</sup> Coat Hi Temp™ 400 3 <sup>rd</sup> Coat Hi Temp™ 400	25 µm 20 µm 20 µm
STEEL – NEW	150°C – 550°C	Abrasive blast clean AS1627.4 Class 2.0	1 <sup>st</sup> Coat Hi Temp™ Uniprime 2 <sup>nd</sup> Coat Hi Temp™ 600 3 <sup>rd</sup> Coat Hi Temp™ 600	25 µm 20 µm 20 µm

NOTE: If application is by brush or roller, additional coats will be necessary to achieve the minimum DFT

<b>SURFACE PREPARATION</b>	<b>Steel:</b> Round off all rough welds, sharp edges and remove weld spatter. Remove grease, oil and other contaminants in accordance with AS1627.1. Degrease with Gamlen CA 1 (a free-rinsing, alkaline detergent) according to the manufacturer's written instructions and all safety warnings. Abrasive blast clean to a minimum of AS1627.4 Class 2. Remove all dust brushing or vacuum. <b>Steel where abrasive blast cleaning is not viable:</b> Rust, mill scale, oxide deposits and old paint films on metal surfaces must be removed by power tool cleaning according to AS1627.2 Class 2. Coating performance is proportional to the degree of surface preparation.
<b>APPLICATION</b>	Mix thoroughly using a power mixer until the contents are uniform. Mix Hi Temp™ catalyst into the Hi Temp™ Finish at a ratio of 190 grams of Catalyst per 4 litre of Finish.
<b>BRUSH/ROLLER</b>	Brushing is the preferred method of application of the first coat. Apply even coats of the mixed material to the prepared surface. When brushing and rolling additional coats may be required to attain the specified thickness.
<b>CONVENTIONAL SPRAY</b>	Thin up to 100ml/litre with Dulux® CR Reducer (965-63020) to aid atomisation. Apply in multiple wet coats overlapping each pass 50%. Typical Set-up Graco AirPro Pressure at Triton 308: Pressure at Gun:
<b>AIRLESS SPRAY</b>	Standard airless spray equipment such as a Graco Xtreme 30:1 with a fluid tip of 15 thou (0.38mm) 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 Dulux® CR Reducer (965-63020) may be added to aid application. 1.8mm (239543) 70-100 kPa (10-15 p.s.i.) 380-410 kPa (55-60 p.s.i.)
<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® 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. Do not apply at relative humidity above 85% or when the surface is less than 3°C above the dewpoint. Allow at least 2 hours drying before heating up. After this initial drying period increase temperature gradually until 150°C is reached. The coating does not fully harden until the surface is heated to 150°C to 200°C for at least 2 hours. Film thicknesses are critical to sound performance; over-thick films will cause blistering on heat-up. In aggressive industrial or marine environments where operating temperatures are generally below 400°C and frequent shut down of plant occurs, maximum corrosion resistance will be given by priming the steel with DUREZINC® i90 rather than Hi Temp™ Uniprime. Not suitable for use under insulation where moisture is present.
<b>CLEAN UP</b>	Clean all equipment with Dulux® CR Reducer (965-63020) immediately after use.
<b>OVERCOATING</b>	Do not overcoat with itself once the coating has been heat cured. Rust, mill scale, oxide deposits and old paint films on metal surfaces must be removed by abrasive blast cleaning to AS1627.4 Class 2.5.
<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 as required for a flammable liquid Class 3 in a bonded 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.
<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 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.

## COMPANY INFORMATION

Dulux Protective Coatings a division of

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

## PACKAGING, TRANSPORT AND STORAGE

<b>PACKAGING</b>	Available in 4 litre containers with 180 g Hi Temp™ Catalyst
<b>TRANSPORTATION WEIGHT</b>	1.60 kg/litre
<b>DANGEROUS GOODS</b>	Class 3 UN 1263

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