

METALSHIELD® HIGH BUILD ZP PRIMER

Fast Dry High Build Zinc Phosphate Primer

LI 004

- FEATURES**
- FAST DRY PRIMER
 - CONTAINS ZINC PHOSPHATE
 - HIGH BUILD SHOP PRIMER
 - SINGLE PACK PRODUCT
 - TOUCHUP SPRAYPAKS AVAILABLE

USES METALSHIELD® HIGH BUILD ZP PRIMER is an anti-corrosive shop or field primer used for the protection of steel in mild industrial and commercial environments and is ideal where fast turn-around time is required. The high build characteristics of METALSHIELD® HIGH BUILD ZP PRIMER offers greater protection than standard shop primers.

SPECIFICATIONS AS/NZS 3750.19 Type 1

RESISTANCE GUIDE

WEATHERABILITY	Will chalk on exterior exposure. Chalking will not detract from the protective properties of the coating. Use a weatherable topcoat if required for appearance.	SOLVENTS	Resists alcohol, mineral turpentine and similar solvents. Esters, ketones, ethers, chlorinated solvents or similar strong solvents are liable to attack the coating
HEAT RESISTANCE	Up to 95°C dry heat	WATER	Resists rain and condensation. Not recommended for permanently damp or immersed exposure
SALTS	Unaffected by splash and spillage of neutral salt solutions	ALKALIS	Not recommended where fumes, splash or spillage may occur
ACIDS	Not recommended where fumes, splash or spillage may occur	ABRASION	Moderate when fully cured

TYPICAL PROPERTIES AND APPLICATION DATA

CLASSIFICATION	High build zinc phosphate primer	APPLICATION CONDITIONS			
FINISH	Low Sheen		Min	Max	
COLOUR	Grey, Red Oxide, Blue and Dark Grey (Made To Order). Touchup spraypaks also available.	Air Temp.	10°C	40°C	
		Substrate Temp.	10°C	40°C	
		Relative Humidity		85%	
COMPONENTS	One	COATING THICKNESS (MICRONS)			
VOLUME SOLIDS	41% (Red Oxide)		Min	Max	Recommended
VOC LEVEL	<510 g/L (Red Oxide)	Wet film per coat (µm)	100	185	120
FLASH POINT	4°C	Dry film per coat (µm)	40	75	50
POT LIFE	Not applicable	SUITABLE SUBSTRATES	Abrasive blast cleaned, hand cleaned or power tool cleaned steel		
MIXING RATIO V/V	Single pack	PRIMERS	Not applicable		
THINNER – BRUSH	965-H0010 Metalshield® Brush Thinner	TOPCOATS	Dulux® single pack topcoats		
THINNER – SPRAY	965-H0009 Metalshield® Spray Thinner	APPLICATION METHODS	Conventional, airless spray or air assisted spray		
PRODUCT CODE	366-87297 Red Oxide 366-87299 Blue 366-87300 Grey 366-89824 Dark Grey (MTO)				

DRYING CHARACTERISTICS AT 50 µm DRY FILM THICKNESS*

Temperature	Humidity	Touch	Handle	Full Cure	OVERCOAT	
					Min ¹	Max ¹
25° C	50%	15 Minutes	2 Hours	7 Days	12 Hours	Extended

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

¹Overcoating can occur up to 2 hours after initial application or after 12 hours. Failing to observe these limits may result in "frying". If in doubt test a small inconspicuous area first. Allow longer times under cold conditions

SPREADING RATE
ASSUMING NO LOSSES

8.2 square metres per litre equals 50 µm dry film thickness

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

METALSHIELD® HIGH BUILD ZP PRIMER

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	Low-med corrosivity (AS2312 Cat C1-3) System ACL1	Power tool clean AS1627.2 St 3	1 st Coat Metalshield® High Build ZP Primer 2 nd Coat Weathershield® Gloss 3 rd Coat Weathershield® Gloss	50 µm 40 µm 40 µm
STEEL – NEW	Low-med corrosivity (AS2312 Cat C1-3) System ALK6	Power tool clean AS1627.2 St 3 Abrasive blast AS1627.4 Class 2	1 st Coat Metalshield® High Build ZP Primer 2 nd Coat Ferrodor® 810 3 rd Coat Ferrodor® 810	50 µm 50 µm 50 µm
STEEL – NEW	Low-med corrosivity (AS2312 Cat C1-3) System ALK2	Power tool clean AS1627.2 St 3 Abrasive blast AS1627.4 Class 2	1 st Coat Metalshield® High Build ZP Primer 2 nd Coat Metalshield® Premium Enamel 3 rd Coat Metalshield® Premium Enamel	50 µm 50 µm 50 µm

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

SURFACE PREPARATION	Steel: 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 according to the data sheet and SDS. Abrasive blast clean to a minimum of AS1627.4 Class 2.5 with a blast profile of 40 – 70 microns. Remove all dust brushing or vacuum. Steel where abrasive blast cleaning is not viable: 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.		
APPLICATION BRUSH/ROLLER	Mix thoroughly using a power mixer until the contents are uniform. Remix thoroughly before application. Suitable for small areas only. Apply even coats of the material to the prepared surface. When brushing and rolling additional coats may be required to attain the specified thickness. Thin if required with Metalshield® Brush Thinner (965-H0010).		
CONVENTIONAL SPRAY	Thin up to 60 ml/litre with Metalshield® Spray Thinner (965-H0009) to aid atomisation. Apply in multiple wet coats overlapping each pass 50%. Typical Set-up Graco AirPro: 1.8mm (239543) Pressure at Triton 308: 70-100 kPa (10-15 p.s.i.) Pressure at Gun: 380-410 kPa (55-60 p.s.i.)		
AIRLESS SPRAY	Standard airless spray equipment such as a Graco Merkur 30:1 with a fluid tip of 13-15 thou (0.33-0.38mm) 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 Metalshield® Spray Thinner (965-H0009) may be added to aid application. Metalshield® Brush Thinner (965-H0010) may be used in hot weather.		
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® 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 dew point. Overcoating can occur up to 2 hours after the initial application or after 12 hours. Failing to observe these limits may result in "frying" or wrinkling. If in doubt test a small inconspicuous area first. Allow longer times under cold conditions. Do not apply over millscale. Abrasive blast cleaned surfaces must be primed within 4 hours. Do not topcoat with two pack coatings DO NOT APPLY ON GALVANISED IRON.		
CLEAN UP	Clean all equipment with Metalshield® Spray Thinner (965-H0009) or Metalshield® Brush Thinner (965-H0010) immediately after use.		
OVERCOATING	Degrease with Gamlen CA 1 according to the data sheet. Test adhesion of existing coating by standard cross hatch adhesion test. If the coating fails, remove it. High-pressure water wash at 8.3 to 10.3 MPa (1,200-1,500 p.s.i.) to remove chalk and dust. Abrade surface to provide a good key for the new coating.		
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 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 must be worn while handling and using. Always wash hands before smoking, eating, drinking or using the toilet.		
USING	Use with good ventilation and avoid inhalation of spray mists and fumes. When spraying, wear combined organic vapour/particulate respirator. Users must always comply with their respective State Spray Painting Regulations at all times.		
FLAMMABILITY	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 ₂ or dry chemical powder. On burning will emit toxic fumes.		
WELDING	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

PACKAGING	Available in 1, 4 and 15 litre containers Available in 300g Aerosols
TRANSPORTATION WEIGHT	1.25 kg/litre (Red Oxide)
DAINGEROUS GOODS	Cans: Class 3 UN 1263 Aerosols: Class 2 UN 1950

Dulux, Ferrodor, Metalshield and Weathershield are registered trade marks of DuluxGroup (Australia) Pty Ltd.

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.