AUDU03647 Dulux Metalshield All Surface Primer

Description and Image

Universal Zinc Phosphate Primer

Features and Benefits

- Fast drying
- Contains zinc phosphate
- Very good corrosion protection
- Suitable for priming all metals including aluminium and galvanised steel
- Suitable for fibreglass

Uses

Metalshield All Surface Primer is a single pack, fast drying, zinc phosphate primer. The anti-corrosive primer provides superior adhesion properties making it the preferred primer for paint systems in mild corrosive environments. Metalshield All Surface Primer can be used over suitably prepared fibreglass, ferrous and non ferrous metals including mild steel, aluminium and galvanized steel. Typical areas of application include structural frames and trusses for factories and warehouses, farm equipment and other light fabricated steelwork.

Performance Guide

Weather **Will chalk on exterior exposure. Use a weatherable topcoat.**	Salt **Excellent resistance to splash and spillage of neutral salt solutions.**
Heat Resistance **Up to 65°C dry heat.**	Water **Resists rain and condensation. Not recommended for permanently damp or immersed exposure.**
Solvent **Withstands intermittent splash and spillage of aliphatic and aromatic hydrocarbons**	Abrasion **Good when fully cured.**
Acid **Not recommended where fumes, splash or spillage may occur.**	Alkali **Not recommended where fumes, splash or spillage may occur.**

Typical Properties

Classification **All metal zinc phosphate primer**	Finish **Flat**
Colour **Neutral Grey**	
Components **1**	Flash Point **-18°C**
Pot Life **Not applicable**	
Mixing Ratio (V/V) **Not applicable**	Thinner **Dulux Urethane Thinner or Acetone**
Suitable Substrates **Prepared mild steel, aluminium, galvanised steel, other non-ferrous metals and fibreglass**	Line/Shade **366-H0070**
Primers **Not applicable**	Topcoats **Alkyd based topcoats.**
Product Code **LI 014**	

Application Methods

Brush, roller, conventional and HVLP spray.

Application Conditions

	Min	Max
Air Temperature	10	45
Substrate Surface Temperature	10	45
Relative Humidity		85

Solids by Volume: 15

	Min	Max	Recommended
Wet Film Per Coat (microns)	60	100	60
Dry Film Per Coat (microns)	10	15	10
Recoat Time (min/hours)	1 hour	Indefinite	When fully cured
Theoretical Spread Rate (m²/L)	10	15	10

Typical Property Notes

A spreading rate of 15.0 sq. metres per litre corresponds to 10 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.

Hardener Details

TYPICAL SPREADING RATE AT RECOMMENDED DRY FILM BUILD

Typical Systems

Typical System

Title:
STEEL - NEW

Preparation Guide
Power tool clean AS1627.2 St 3
Abrasive blast AS1627.4 Class 2

Coat	Product	Spread Rate (m²/L):	WFT (micron):	DFT (micron)
1st Coat	**Metalshield All Surface**	**15.0**	**60**	**10**
2nd Coat	**Metalshield Prem UV Resistant Enamel Topcoat**	**9.2**	**110**	**50**
			Minimum System DFT:	**60**

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

Typical System

Title:
STEEL - NEW

Preparation Guide
Power tool clean AS1627.2 St 3
Abrasive blast AS1627.4 Class 2

Coat	Product	Spread Rate (m²/L):	WFT (micron):	DFT (micron)
1st Coat	**Metalshield All Surface**	**15.0**	**60**	**10**
2nd Coat	**Metalshield QD Enamel**	**9.5**	**105**	**40**
			Minimum System DFT:	**50**

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

Typical System

Title:
NON FERROUS METALS AND FIBREGLASS

Preparation Guide
Clean, degrease and abrade surface

Coat	Product	Spread Rate (m²/L):	WFT (micron):	DFT (micron)
1st Coat	**Metalshield All Surface**	**15.0**	**60**	**10**
1st Coat	**Metalshield Prem UV Resistant Enamel Topcoat**	**9.2**	**110**	**50**
			Minimum System DFT:	**60**

Notes:
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 (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 2.5 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.

Non-ferrous metals: Round off all sharp edges. Remove grease, oil and other contaminants in accordance with AS1627.1. Whip blast with fine non-metallic media such as plastic, glass or garnet to provide a key. Remove all dust with compressed air. Alternatively, degrease and abrade the surface with a non-metallic abrasive pad wetted with Gamlen CA 1 (a free-rinsing, alkaline detergent) and water. Rinse thoroughly with fresh potable water.

Application Guide

Application Method
Brush, roller, conventional, airless spray or air assisted spray

Brush / Roller
Suitable for small areas only. When brushing and rolling additional coats may be required to attain the specified thickness.

Conventional Spray
Thin up to 150 ml/litre with Acetone or Dulux? Urethane Thinner (965-63023) to aid atomisation. Apply in multiple wet coats overlapping each pass 50%.
Typical Set-up
Graco Delta Gun: 1.4mm (239543)
Pressure at Pot: 70-100 kPa (10-15 p.s.i.)
Pressure at Gun: 380-410 kPa (55-60 p.s.i.)
HVLP 1.4 Fluid Tip

Airless Spray
Not recommended

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. 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. Do not overcoat before the minimum overcoat interval or wrinkling may occur. The surface can be marked for several days after application. Abrasive blast cleaned surfaces must be primed within 4 hours.

Clean Up
Clean all equipment with Acetone or Dulux Urethane Thinner (965-63023) 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.

Health and Safety
Safety Precautions **Read Data Sheet, Material 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.**
Using **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 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. Fight fire with foam, CO2 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**
In case of emergency, please call 1800 220 770.

Transport and Storage	
Packaging **Available in 500mL, 1 and 4 litre containers**	Transportation **1.053 kg/litre (Neutral Grey)**
Class **3**	UN Number **1263**

Disclaimer

Unless Dulux has provided you with a customised, project-specific specification, this Data Sheet does not represent that any particular product or product system will be suitable for your project.

Any information provided in this Data Sheet is given in good faith and is believed by Dulux to be correct at the time of publication. Products and coating systems can be expected to perform as indicated in this Data Sheet, provided the substrate is in good condition, the coatings are applied by a suitably experienced and skilled applicator, and the preparation, application and maintenance is followed strictly as set out in this Data Sheet, and as recommended on the applicable Safety Data Sheets for the relevant products, available from www.duspecplus.com.au. Climatic conditions at application time can affect product suitability and performance.

The correct colour or colour match is the responsibility of the applicator. Colours will change over time and Dulux does not guarantee that the same colour newly mixed will match a colour applied earlier which has been subjected to weathering or other change elements. No product colour is guaranteed against colour change.

Where any liability of Dulux in respect of this Data Sheet cannot by law be excluded, Dulux's liability is limited, as permitted by law and at Dulux's option, to resupply of the relevant products or services or to reimbursing the cost of those products or services.

WHERE LEAD MAY BE PRESENT: The asset manager is responsible for verifying the presence of lead and determining whether to remove or encapsulate the lead. If lead is present, the work must be done in strict accordance with AS 4361 Parts 1 and 2 and Worksafe Australia guidelines.