

DULUX RUSTSHIELD ANTI RUST METAL PRIMER

TECHNICAL DATA SHEET

Version 3 – 2025 JANUARY

THIS ISSUE SUPERSEDES ALL PREVIOUS PUBLICATIONS

PRODUCT DESCRIPTION

Water-based metal primer with good adhesion and anti-corrosion properties.

PRODUCT USES

- Designed to be used on well-prepared metal surfaces.
- Provides excellent adhesion and a good base for top coating.

FEATURES AND BENEFITS

- Best available primer for metal surfaces, with excellent adhesion properties.
- An excellent anti-corrosive primer for use over correctly prepared metal surfaces.
- Can be over coated with most conventional paints, both solvent and water-based
- Water-based
- Non-toxic and non-flammable.
- Quick drying.

PRODUCT INFORMATION

Appearance	Smooth
Colour	Black, Light Grey and Red Oxide
Binder Type	Acrylic
Density at 23°C	Approx. 1.2Kg/L
Solids Content	By weight: Approx. 41% By volume: Approx. 28%
Packaged Viscosity	Viscosity at 23°C: Approx. 105 KU.
Spreading Rate	Approx. 12m ² per litre. Spreading rate depends on surface porosity, profile and application method.
Recommended DFT per coat	25µm - 30µm
Recommended WFT per coat	90µm - 110µm
Flash Point	Water-based material – not flammable.

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APPLICATION INFORMATION

Mixing	Stir until homogeneous with a flat paddle.
Application Surface conditions	Surface Temperature between 10 - 35°C. Relative Humidity between 10 - 85 % OR 2°C above dew point minimum.
Application methods	<u>Airless spray</u> . Thin up to 5% by volume with potable water in hot windy weather, otherwise use as supplied after thorough stirring. Use a 0,32mm orifice with angle to suit the work piece. <u>Air (conventional) spray</u> . Thin up to 10% by volume with potable water. <u>Brush and Roller</u> - Two coats are recommended.
Thinner	Thinning not recommended. Ready for use after thorough stirring. Potable water if required for spraying to maximum of 5% of product volume. *Note if diluted multiple coats will be required to achieve the required minimum 60µm total dry film thickness.
Drying Time	Touch dry 1 hour at 23°C.
Recoating Time	<u>4 Hours</u> for water-based topcoats. <u>48 hours</u> for conventional solvent-based topcoats.
Cleaning of equipment	After use, remove as much product as possible, and then clean immediately with water.
Substrates	Suitable for correctly prepared mild steel & iron, galvanised iron, stainless steel and chromadek
Precautions:	Do not apply during cold (below 10°C) or if the temperature is liable to fall below 10°C during the 4 hours following application, or wet weather. Do not apply over rusty unprepared metal surfaces. Quick drying - avoid application to very hot surfaces. Not designed to withstand natural weathering. Overcoat within one week particularly in a coastal atmosphere.
Coats Required	Apply two coats Dulux Rustshield , for correct performance results to achieve a continuous closed film and solid colour.
Top Coating	Can be over coated with most conventional used topcoats - Solvent and Water-Based paints. *See <u>Recoating Time</u> for curing period before over-coating with the respective topcoats.

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SURFACE PREPARATION

Ensure that surfaces are sound and free from contaminants such as rust, mill scale, salt, algae, dust, oil, grease, dirt, and debris. Surfaces must be thoroughly dry.

NEW SURFACES

Mild Steel and Iron (Finishing with Conventional Coatings)

- Inspect shop-primer thoroughly for damage by installation. Abrade new surfaces lightly and remove rust, mill scale by sanding, scraping or with steel wire brushes back to sound mild steel and iron or sandblast to SA 2½.
- Ensure that the sanded areas are dry and free of grease and dust. A solvent wash (rags dipped in lacquer thinner) may be used. Change the rags frequently. Allow drying, OR clean with **Dulux Galvanised Iron Cleaner** according to technical data sheet.
- Apply two coats **Dulux Rustshield**.

Galvanised Iron & Stainless Steel (new, unweathered)

- Remove all traces of temporary protective coating, dirt and grease from the surface with **Dulux Galvanised Iron Cleaner**. Ensure complete removal of **Dulux Galvanised Iron Cleaner** by rinsing with running water. A water-break free surface indicates thorough cleaning - running water should not form droplets. If a water-break free surface was not achieved, repeat the cleaning process.
- Prime immediately after cleaning with two coats **Dulux Rustshield**.

Galvanised Iron & Stainless Steel (unpainted, weathered)

- Remove all loose rust and white scale by means of wire brushing, sanding, chipping, or mechanical scouring - down to bright metal. To remove dirt, salts and zinc corrosion (white rust) clean thoroughly with **Dulux Galvanised Iron Cleaner** achieving a water-break free surface.
- Areas showing red rust must be removed back to bright galvanised iron.
- Prime immediately after preparation with two coats **Dulux Rustshield**.

PREVIOUSLY PAINTED SURFACES

Mild Steel, Galvanised Iron, Stainless Steel & Chromadek

- Perform adhesion tests on the existing coating to crosscut test ISO 2409-2013 standards. Remove loose paint back to a sound surface or substrate. In poor condition, strip completely.

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SURFACE PREPARATION

PREVIOUSLY PAINTED SURFACES

Mild Steel, Galvanised Iron, Stainless Steel & Chromadek - Continue

- Remove all loose rust and white scale by means of wire brushing, sanding, chipping, or mechanical scouring - down to bright metal. To remove dirt, salts and zinc corrosion (white rust) clean thoroughly with **Dulux Galvanised Iron Cleaner** achieving a water-break free surface.
- Areas showing red rust must be removed back to bare metal.
- Sand sound enamel surfaces to a matt finish to provide a key and improve adhesion.
- For sound surfaces scrub the area with **Dulux Pre-Paint Sugar Soap**/water solution. Rinse with running water or clean with high pressure water jet to remove **Dulux Pre-Paint Sugar Soap** residue and other surface contaminants.
- Prime immediately after preparation with two coats **Dulux Rustshield**

HEALTH AND SAFETY INFORMATION

Warning: May cause an allergic skin reaction. Toxic to aquatic life with long lasting effects.

Dulux products contain no added lead. Avoid contact with skin or eyes. Keep out of reach of children. If accidentally swallowed, seek medical advice and show this container to the doctor. Dry sanding, flame cutting, and/or welding of the dry paint film will give rise to dust and/or hazardous fumes. Wet sanding should be used wherever possible. If exposure cannot be avoided by the provision of local exhaust ventilation, suitable respiratory protective equipment should be used. Do not empty into drains or watercourses. Ensure good ventilation during application and drying.

Safety and Technical datasheets available on request. Call a POISON CENTRE or doctor/physician if you feel unwell. Dispose of contents and container in accordance with all local, regional, national or international regulations.

To avoid the risk of spillage, always store and transport containers in a secure, upright position.

ADDITIONAL INFORMATION

Packaging	Light Grey – 1Lt, 5Lt & 20Lt Black and Red Oxide – 1Lt and 5Lt
Storage Conditions	Store under cool dry conditions above 10°C away from direct sunlight, heat and extreme cold.
Disclaimers	N/A product specific

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TDS STANDARD DISCLAIMER

The recommendations contained herein are given in good faith and meant to guide the specifier or user in accordance with good painting practices. They are gained from our tests and experiences and are believed to be accurate and reliable. No warranty/guarantee is implied by the recommendations contained herein since the conditions of use; application method, substrate and cleanliness of the substrate are beyond Dulux control.

Important Note; Technology may change with time, necessitating changes to this Technical Data Sheet (TDS).

It is the responsibility of the user to ensure that the latest TDS is being used for reference. Dulux Technical Data Sheets are available on our website www.dulux.co.za or please contact: Dulux On-Line on 0860 330 111. Email ZA.Helpline@akzonobel.com

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