

## NZDU02447 Dulux Aquanamel Gloss on New Steel [Interior]

#### Scope of Works

DULUX Aquanamel Gloss is a premium quality water based interior and exterior acrylic enamel, that dries to a tough finish. This product is so resistant that common marks are able to be removed virtually without trace. It resists knocking, chipping and yellowing and is highly recommended for walls, doors, architraves, timber trim and skirting boards as an alternative to enamels, and is ideal for bathrooms, kitchens and laundries.

#### Substrate and Substrate Preparation

#### Substrate Notes

This is a generic steel or iron substrate. Please see the respective substrate for: non-ferrous metals, galvanised steel, precoated sheet steel. Other specialty metal substrates may also not be covered by this substrate.

Uncoated ferrous metal is very unstable and will readily react with water and oxygen to form oxides (rust). The presence of salts will speed up rust formation.

Millscale is a shiny, bluish iron oxide produced by heat and pressure during manufacture and is often mistaken for shop primer or clean steel. Millscale is very difficult to remove by hand and should be abrasive blast cleaned off. The presence of millscale is responsible for a significant proportion of coating failures.

#### MILD STEEL

Mild steel contains less than 0.25% carbon. New mild steel surfaces should be inspected for millscale, rust, sharp edges, burr marks and welding flux, forming or machine oils, salts, chemical contamination or mortar splashes on them, all of which which must be removed.

#### CAST IRON

Cast iron is a carbon-steel alloy containing substantial amounts of graphite (usually above 2.5%) which has been cast and therefore does not contain welds.

#### BLACK STEEL

Ferrous metal partially protected by a thin outer layer of black iron oxide (Magnetite). Rust protection offered with black steel is minimal and is often treated with an oil coating during manufacture to inhibit the rust process.

#### WROUGHT IRON

A historic grade of iron, with a low carbon content (0.1-0.25%) but significant levels of impurities. It has little use today and has been replaced by mild steel.

#### Substrate Preparation Notes

#### DOMESTIC

CLEAN

Remove all surface contamination such as oil, grease or dirt by washing with an alkaline detergent, such as Dulux Prep Wash, and rinse with fresh potable water.

#### PREPARE SURFACE

Surface shall be power tool cleaned, to remove all rust, weld flux and mill scale, back to clean, corrosion-free metal, and to provide a suitable key for the coating system. Remove all residual loose matter resulting from the cleaning process by brush, vacuum, or clean, compressed air.

#### PRIME

Apply a suitable, corrosion-inhibiting primer to any bare metal areas as soon as possible, before the surface oxidises or becomes contaminated.

#### RUST AFFECTED STEEL

1. Remove any loose or flaking coating back to a hard edge by scraper or power tool. Feather back all edges to remove ridges. Abrade surface of remaining coating to provide a suitable surface key for adhesion of the new coating system.

Using wire brush or power tool cleaning methods as appropriate, clean all bare metal surfaces and rust-affected areas. Remove filings, preferably by vacuum or compressed air. Ensure that the surface is clean, corrosion-free and dry immediately prior to application of primer coat.
 Spot prime all bare metal with an appropriate, corrosion-inhibiting primer as soon as possible, before the surface oxidises or becomes contaminated.

## INDUSTRIAL

#### CLEAN

Wash, degrease and remove all surface contaminants in accordance with AS1627.1 with a free-rinsing, alkaline detergent, such as Dulux Prep Wash. Wash with fresh potable water and ensure that all soluble salts are removed in accordance with AS 3894.6 methods A&D.

#### PREPARE SURFACE

Grind all sharp edges with a power tool to a minimum radius of 2 mm. Power tool clean welds to AS1627.2 Class 2 to remove roughness. Remove filings, preferably by vacuum or compressed air. Abrasive blast clean all steel surfaces to be painted in accordance with AS1627.4 to visual standard AS1627.9 Class 2.5 (equivalent to ISO8501-1, Sa 2.5: Very Thorough Blast-Cleaning). Use a non-metallic medium that will generate a surface profile of 35 to 65 microns (as tested to AS3894.5 Method A.)

PRIME



# **Specification**



Commence application within 4 hours of abrasive blast cleaning or before surface becomes contaminated, otherwise repeat abrasive blasting step. Stripe coat welds, bolts, boltholes and all edges with primer before application of full primer coat nominated in the Coating System section of the specification.

TREATMENT OF ON SITE WELDING

1. Remove weld spatter.

2. Power tool clean welds to AS1627.2 Class 2 to remove roughness. Remove filings, preferably by vacuum or compressed air.

3. Prime welds immediately with the nominated primer before contamination can reoccur. Ensure that the primer overlaps the sound adjacent coating by not less than 25mm or greater than 50mm.

4. Apply intermediate and topcoats over the primed welds to match the surrounding coating system, overlapping the sound adjacent coating by not less than 25mm or greater than 50mm.

### **Coating System Summary**

- 1st Coat
  Dulux Luxaprime Zinc Phosphate
- 2nd Coat • 3rd Coat
- Dulux Aquanamel Gloss Dulux Aquanamel Gloss

| Coating System                              |                                   |                             |             |
|---|-----------------------------------|-----------------------------|-------------|
| 1st Coat — Dulux Luxaprime Zinc Phosphate   |                                   |                             |             |
| Coat Type<br>1st Coat                       | Datasheet<br>NZDU00507 Dul        | ux Luxaprime Zinc Phosphate | 3           |
| Read the full Datasheet details at <u>I</u> | Dulux Luxaprime Zinc Phosph       | ate                         |             |
| Application Methods                         |                                   |                             |             |
| Air Spray 🛉 Airless                         | Spray 🕇 Brush 🕇                   | Roller                      |             |
|   | Min                               | Max                         | Recommended |
| Theoretical Spread Rate (m²/L)              |                                   |                             | 6           |
| Wet Film Per Coat (microns)                 |                                   |                             | 165         |
| Dry Film Per Coat (microns)                 |                                   |                             | 75          |
| Recoat Time **                              | 24 Hours                          | Indefinite                  |             |
| Meets ECNZ V.O.C. Requirements?             |                                   |                             |             |
| Not Applicable                              |                                   |                             |             |
| 2nd Coat — Dulux Aquanamel                  | Gloss                             |                             |             |
| Coat Type<br><b>2nd Coat</b>                | Datasheet<br><b>NZDU00333 Dul</b> | ux Aquanamel Gloss          |             |
| Read the full Datasheet details at ]        | Dulux Aquanamel Gloss             |                             |             |
| Application Methods                         |                                   |                             |             |
| 📬 Air Spray 🛉 Airless                       | Spray 📍 Brush 🍸                   | Roller                      |             |
|   | Min                               | Max                         | Recommended |
| Theoretical Spread Rate (m²/L)              |                                   |                             | 16          |
| Wet Film Per Coat (microns)                 |                                   |                             | 62          |



# **Specification**



| Dry Film Per Coat (microns)   |  |  | 23                                 |
|---|--|--|------------------------------------|
| Recoat Time **  | 2 hours                                | Indefinite   |                                    |
| V.O.C. Level<br><60 g/L inclusive of Dulux Low VOC tinter.  |  | Meets ECNZ V.O.C. Requirements?<br>Yes<br>Total Volatile Organic Content (TVOC) values are calculated in<br>accordance to the stated methodology within Green Star Technical<br>Manuals. The TVOC content is theoretically calculated as the sum total<br>of the known VOC values of the product's raw material components.<br>These materials include the base paint plus additional low VOC tinter<br>required for non-factory packaged colours. |                                    |
| Coating Application Details<br>*Some colours may require more t<br>with a broad flat stirrer using an up<br><b>Brush, roller or spray</b> |  | pats to achieve full opacity. Stir contents  | thoroughly before and during use   |
| <b>Brush/Roller</b><br>Brush- Dulux Professional range of   | brushes are recommended.               |  |                                    |
| Roller- Very short nap roller e.g. 5n   | ım                                     |  |                                    |
| Finally lay off each patch with light achieve the smoothest finish. Do n  | vertical strokes again lapping lightly | es. Paint one patch at a time working ba<br>into previously painted patches. On wal<br>ning is not recommended, however, unc<br>e to maximum of 50 ml per litre.   | l areas use a 5mm nap roller to    |
|   |  | to 100mL/L of water may be added for a , to aid atomisation.   | application by conventional spray, |
| Wagner recommendation: F230 Aircoat recommended.<br>Tip: 211 for archs and trim, 411 for doors<br>Pressure: 1100 PSI                      |  |  |                                    |

1-1.5 at the bar at the gun.

Graco recommendation: Air Assisted Airless. Tip: 210 or 310 Pressure: 1100 PSI

| SDS Number     | SDS Link             |
|----------------|----------------------|
| DLXGHSEN001089 | <u>View SDS Link</u> |

| 3rd Coat — Dulux Aquanamel Gloss                                |  |            |             |
|---|--|------------|-------------|
| Coat Type<br><b>3rd Coat</b>                                    | Datasheet<br>NZDU00333 Dulux Aquanamel Gloss |            |             |
| Read the full Datasheet details at <u>Dulux Aquanamel Gloss</u> |  |            |             |
| Application Methods   |  |            |             |
| Air Spray 🛉 Airless Spray 👎 Brush 🚏 Roller                      |  |            |             |
|   | Min  | Max        | Recommended |
| Theoretical Spread Rate (m²/L)                                  |  |            | 16          |
| Wet Film Per Coat (microns)                                     |  |            | 62          |
| Dry Film Per Coat (microns)                                     |  |            | 23          |
| Recoat Time **  | 2 hours                                      | Indefinite |             |





| V.O.C. Level<br><60 g/L inclusive of Dulux Low VOC tinter. | Meets ECNZ V.O.C. Requirements?<br><b>Yes</b>  |
|--|--|
|  | Total Volatile Organic Content (TVOC) values are calculated in<br>accordance to the stated methodology within Green Star Technical<br>Manuals. The TVOC content is theoretically calculated as the sum total<br>of the known VOC values of the product's raw material components.<br>These materials include the base paint plus additional low VOC tinter<br>required for non-factory packaged colours. |

Coating Application Details

\*Some colours may require more than the recommended number of coats to achieve full opacity. Stir contents thoroughly before and during use with a broad flat stirrer using an upward lifting action.

#### Brush, roller or spray

#### Brush/Roller

Brush- Dulux Professional range of brushes are recommended.

Roller- Very short nap roller e.g. 5mm

Apply evenly, dividing area into patches about 50-60 square centimetres. Paint one patch at a time working back into previously applied paint. Finally lay off each patch with light vertical strokes again lapping lightly into previously painted patches. On wall areas use a 5mm nap roller to achieve the smoothest finish. Do not lay off with a brush. Generally thinning is not recommended, however, under hot conditions Dulux Hot Weather Thinner should be added to improve application performance to maximum of 50 ml per litre.

#### Airless/Conventional Spray: Airless/Conventional Spray

Suitable for application by conventional or airless spray equipment. Up to 100mL/L of water may be added for application by conventional spray, up to 30mL/L of water for airless spray, and up to 5mL/L for HVLP spray, to aid atomisation.

Wagner recommendation: F230 Aircoat recommended. Tip: 211 for archs and trim, 411 for doors Pressure: 1100 PSI 1-1.5 at the bar at the gun.

Graco recommendation: Air Assisted Airless. Tip: 210 or 310 Pressure: 1100 PSI

| SDS Number     | SDS Link             |
|----------------|----------------------|
| DLXGHSEN001089 | <u>View SDS Link</u> |

Coating System Notes

\* Practical Spreading Rate will vary from the quoted Theoretical Spreading Rate due to factors such as method and condition of application and surface roughness. \*\* Recoat times are quotes for 25°c and 50% relative humidity, these may vary under different conditions.







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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.

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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/ NZS 4361 Parts 1 and 2 and Worksafe Australia or New Zealand guidelines.