LUXATHANE® DTM
Direct to Prepared Metal Polyurethane Finish

FEATURES
- CONTAINS CORROSION INHIBITING PIGMENT ZINC PHOSPHATE
- INCREASED PRODUCTIVITY, NO PRIMER REQUIRED IN MILD CORROSIVE CONDITIONS
- VERY GOOD UV RESISTANCE AND GLOSS RETENTION
- GOOD DRYING AND RECOAT PROPERTIES
- TINTABLE – AVAILABLE IN OVER 2,500 COLOURS
- GLOSS FINISH

USES
LUXATHANE® DTM is a two-component acrylic polyurethane that incorporates the rust inhibitive pigment, zinc phosphate, allowing for direct application to abrasive blast or power tool cleaned steel. LUXATHANE® DTM delivers both corrosion protection and an attractive decorative gloss finish. The high build properties of LUXATHANE® DTM direct to metal surfaces, without the use of a primer, allows for the fast coating of steel that is subject to sheltered or mild (C1-C3) corrosive environments.

Typical areas of application of LUXATHANE® DTM include structural frames and trusses for factories and warehouses, farm and heavy engineering equipment.

LUXATHANE® Accelerator is available for use with Standard Hardener to promote faster drying.

SPECIFICATIONS

RESISTANCE GUIDE

WEATHERABILITY
Very good gloss and colour retention on exterior exposure

SOLVENTS
Unaffected by splash and spillage of common alcohols, aliphatic and aromatic hydrocarbons, esters and ketones

HEAT RESISTANCE
Up to 120°C dry heat

WATER
Excellent resistance to fresh and salt water but not suitable for immersion

SALTS
Unaffected by splash and spillage of most salt solutions

ALKALIS
Good resistance to splash and spillage of most common alcalis

ACIDS
Good resistance to splash and spillage of most common acids

ABRASION
Very good when fully cured

TYPICAL PROPERTIES AND APPLICATION DATA

CLASSIFICATION
Two pack acrylic polyurethane coating

APPLICATION CONDITIONS
Min Max

FINISH
Gloss

Air Temp. 10°C 45°C

COLOUR
White and an extensive range of tinted colours

Substrate Temp. 10°C 45°C

COMPONENTS
Two

Relative Humidity 85%

VOLUME SOLIDS
55% (White)

COATING THICKNESS (MICRONS)

VOC LEVEL
<430 g/litre (White, untinted)

Wet film per coat (μm) 125 180 165

FLASH POINT
>23°C

Dry film per coat (μm) 70 100 90

POT LIFE
5 hours (4 litre kit, 25°C)

SUITABLE SUBSTRATES
Abrasive blast cleaned, hand cleaned or power tool cleaned steel

MIXING RATIO V/V
Part A : 4

APPLICATION METHODS
Conventional, HVLP, airless spray or air assisted spray

Part B : 1

THINNER – BRUSH
965-63023 Urethane Thinner

PRIMERS
N/A

THINNER – SPRAY
965-63023 Urethane Thinner

TOPCOATS
N/A

PRODUCT CODE
727-63313 White

APPLICATION METHODS
Conventional, HVLP, airless spray or air assisted spray

727-39141 Golden Yellow

727-63001 Light Base

727-63003 Clear Base

976-H0165 Standard Hardener

976-H0229 Part C Accelerator

DRYING CHARACTERISTICS AT 90 μm DRY FILM THICKNESS

<table>
<thead>
<tr>
<th>Temperature</th>
<th>Humidity</th>
<th>Touch</th>
<th>Handle</th>
<th>Full Cure</th>
<th>OVERCOAT</th>
</tr>
</thead>
<tbody>
<tr>
<td>10°C</td>
<td>50%</td>
<td>75 Minutes</td>
<td>13 Hours</td>
<td>7 Days</td>
<td>13 Hours</td>
</tr>
<tr>
<td>15°C</td>
<td>50%</td>
<td>60 Minutes</td>
<td>10 Hours</td>
<td>7 Days</td>
<td>10 Hours</td>
</tr>
<tr>
<td>25°C</td>
<td>50%</td>
<td>30 Minutes</td>
<td>5 Hours</td>
<td>7 Days</td>
<td>5 Hours</td>
</tr>
</tbody>
</table>

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

SPREADING RATE

6.1 square metres per litre equals 90 μm dry film thickness

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

STANDARD HARDENER WITH ACCELERATOR (PART C)

MIXING RATIO
PART C: 1 DOSE PER 4 LITRE KIT

COATING THICKNESS (MICRONS)  APPLICATION CONDITIONS

<table>
<thead>
<tr>
<th>Wet film per coat (μm)</th>
<th>Min</th>
<th>Max</th>
<th>Recommended</th>
<th>Air Temperature</th>
<th>Min</th>
<th>Max</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>130</td>
<td>185</td>
<td>165</td>
<td>10°C</td>
<td>45°C</td>
<td></td>
</tr>
<tr>
<td>Dry film per coat (μm)</td>
<td>70</td>
<td>100</td>
<td>90</td>
<td>10°C</td>
<td>45°C</td>
<td></td>
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SOLIDS BY VOLUME

<table>
<thead>
<tr>
<th>VOC LEVEL</th>
<th>&lt;440 g/L (White)</th>
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</thead>
<tbody>
<tr>
<td>POT LIFE</td>
<td>5 Hours (4 Litre kit, 25°C)</td>
</tr>
</tbody>
</table>

COATING THICKNESS (MICRONS)

APPLICATION CONDITIONS

| SOLIDS BY VOLUME | 54% (White) |
| VOC LEVEL       | <440 g/L (White) |
| POT LIFE        | 5 Hours (4 Litre kit, 25°C) |

DRYING CHARACTERISTICS AT 50 μm DRY FILM THICKNESS*

<table>
<thead>
<tr>
<th>Temperature</th>
<th>Humidity</th>
<th>Touch</th>
<th>Handle</th>
<th>Full Cure</th>
<th>OVERCOAT*</th>
</tr>
</thead>
<tbody>
<tr>
<td>15°C</td>
<td>50%</td>
<td>50 minutes</td>
<td>6 Hours</td>
<td>7 Days</td>
<td>6 Hours</td>
</tr>
<tr>
<td>25°C</td>
<td>50%</td>
<td>25 minutes</td>
<td>4 Hours</td>
<td>7 Days</td>
<td>4 Hours</td>
</tr>
</tbody>
</table>

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

SPREADING RATE

with Accelerator
assuming no losses

6.0 square metres per litre equals 90 μm dry film thickness

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

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.

<table>
<thead>
<tr>
<th>SURFACE</th>
<th>PREPARATION GUIDE</th>
<th>SYSTEM</th>
<th>DFT (μm)</th>
</tr>
</thead>
<tbody>
<tr>
<td>STEEL</td>
<td>Low–medium corrosivity (AS2312.1 Cat C1–3)</td>
<td>Abrasive blast AS1627.4 Class 2.5 or Power tool clean AS1627.2 St 3</td>
<td>Luxathane® DTM</td>
</tr>
<tr>
<td>ALUMINIUM</td>
<td>Exterior/Interior</td>
<td>Clean, degrease and abrade</td>
<td>Luxathane® DTM</td>
</tr>
</tbody>
</table>

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

**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 using 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.*

*Non-ferrous metals: Round off all sharp edges. Degrease in accordance with AS1627.1. Whip blast with fine non-metallic media 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 and water. Rinse thoroughly with fresh potable water.*

**APPLICATION**

*Mix each can thoroughly using a power mixer until the contents are uniform. Ensure bases have been tinted to the correct colour before use. DULUX® ASSUMES NO RESPONSIBILITY FOR THE APPLICATION OF INCORRECT COLOUR. Mix the contents of both packs together thoroughly with a power mixer and let stand for 10 minutes. Box all components before use to ensure colour consistency. Relax thoroughly before application.*

**BRUSH/ROLLER**

*Suitable for small areas only. Thin with up to 100 ml/litre with Dulux® Urethane Thinner (965-63023) to aid application. When brushing and rolling additional coats may be required to attain the specified thickness.*

**CONVENTIONAL SPRAY**

*Thin up to 150ml/litre with Dulux® Urethane Thinner (965-63023) to aid atomisation. Apply in multiple wet coats overlapping each pass 50%*  

**AIRLESS SPRAY**

*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 550-900 kPa (80-100 p.s.i.) at the pump. Thinning is not normally required but up to 100 ml/litre of Dulux® Urethane Thinner (965-63023) may be added to aid application.*

**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. Freshly mixed material must not be added to material that has been mixed for some time. The rate of cure is dependent upon temperature. Do not apply at temperatures below 5°C. Do not apply at relative humidity above 85% or when the surface is less than 3°C above the dewpoint. Ensure you read and understand the safety precautions on the Material Safety Data Sheets for the two components before using. The recommended thinner MUST be used as some solvents react with the isocyanate hardener seriously degrading the life of the coating. Under no circumstances should water or non-recommended thinner be allowed to contaminate the product. In hot weather use DUTHIN® 040 (965-41266) to improve flow and to reduce dry spray. Use of Part C Luxathane® Accelerator may result in different gloss level and appearance when compared with result without Part C Luxathane® Accelerator. Use only within the allowable temperature ranges quoted above.*

**CLEAN UP**

*Clean all equipment with 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, remit 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 a covered bunded area.*

**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. Isocyanate in the hardener reacts with water to produce gas. If a closed container shows signs of internal pressure, cover it completely with a cloth and remove the lid slowly to prevent splashing or violent expulsion of the lid.*

**USING**

*Use with good ventilation and avoid inhalation of spray mists and fumes. When spraying, wear a positive-pressure, air-supplied respirator. Users must comply with the provisions of the 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. Fire fight 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.*

**COMPANY INFORMATION**

<table>
<thead>
<tr>
<th>Dulux Protective Coatings a division of</th>
<th>DuluxGroup (Australia) Pty Ltd</th>
<th>DuluxGroup (New Zealand) Pty Ltd</th>
</tr>
</thead>
<tbody>
<tr>
<td>DuluxGroup (Australia) Pty Ltd</td>
<td>DuluxGroup (New Zealand) Pty Ltd</td>
<td></td>
</tr>
<tr>
<td>1956 Dandenong Road, Clayton 3168</td>
<td>150 Hutt Park Road, Lower Hutt, NZ</td>
<td></td>
</tr>
<tr>
<td>A.B.N. 67 000 049 427</td>
<td>A.B.N. 55 133 404 118</td>
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