

DURETHANE™

Clear Polyester Urethane

PC 410

- FEATURES**
- OUTSTANDING CHEMICAL RESISTANCE
 - RESISTS MOISTURE, GREASE, DETERGENTS AND CHEMICALS
 - EXCELLENT UV RESISTANCE
 - NON YELLOWING
 - EXCELLENT ADHESION AND ABRASION RESISTANCE

USES DURETHANE™ is a non-yellowing clear polyester urethane finish available in two gloss levels - high gloss and low sheen.

DURETHANE™ has outstanding chemical and abrasion resistance and exterior durability. DURETHANE™ Clear Low Sheen may be used over gloss polyurethanes to impart an elegant low sheen finish in areas of high demand such as retail complexes, restaurants and many other commercial projects. DURETHANE™ can be used on exterior areas such as curtain walls, architectural features, canopies and facades. Ideal topcoat for use in anti-graffiti systems.

SPECIFICATIONS

RESISTANCE GUIDE

| | | | |
|------------------------|--|-----------------|---|
| WEATHERABILITY | Excellent on exterior exposure | SOLVENTS | Excellent resistance to splash and spillage of common alcohols, aliphatic and aromatic hydrocarbons, esters and ketones |
| HEAT RESISTANCE | Up to 105°C dry heat | WATER | Excellent resistance to fresh and salt water but not suitable for immersion |
| SALTS | Excellent resistance to neutral and alkali salts | ALKALIS | Excellent resistance to splash and spillage of most common alkalis |
| ACIDS | Good resistance to splash and spillage of mild acids | ABRASION | Excellent when fully cured |

TYPICAL PROPERTIES AND APPLICATION DATA

| | | | | | | |
|-------------------------|------------------------------|-------------------------|------------------------------------|--|------|-------------|
| CLASSIFICATION | Two pack polyester urethane | | APPLICATION CONDITIONS | | | |
| FINISH | High Gloss and Low Sheen | | | Min | Max | |
| COLOUR | Clear Gloss, Clear Low Sheen | | Air Temp. | 5°C | 45°C | |
| | | | Substrate Temp. | 5°C | 45°C | |
| | | | Relative Humidity | | 85% | |
| | | | Concrete Moisture | | <10% | |
| COMPONENTS | Two | | COATING THICKNESS (MICRONS) | | | |
| VOLUME SOLIDS | 49% | | | Min | Max | Recommended |
| VOC LEVEL | <490 g/L | | Wet film per coat (µm) | 61 | 102 | 82 |
| FLASH POINT | 15°C | | Dry film per coat (µm) | 30 | 50 | 40 |
| POT LIFE | 6 hours (5 litre kit, 25°C) | | SUITABLE SUBSTRATES | Concrete and polyurethane finishes. Refer to your Dulux® Representative for specific substrates. | | |
| MIXING RATIO V/V | Part A : 2 | Part B : 1 | PRIMERS | Not applicable. | | |
| THINNER – BRUSH | 965-08410 | Dulux® Duthin® 540 | TOPCOATS | Not applicable | | |
| THINNER – SPRAY | 965-63023 | Dulux® Urethane Thinner | APPLICATION METHODS | Brush, conventional, airless spray or air assisted spray. | | |
| PRODUCT CODE | 425-30900 | Clear Gloss | | | | |
| | 425-82960 | Clear Low Sheen | | | | |
| | 976-50357 | Hardener | | | | |

DRYING CHARACTERISTICS AT 40 µm DRY FILM THICKNESS*

| Temperature | Humidity | Touch | Handle | Full Cure | OVERCOAT | |
|-------------|----------|---------|----------|-----------|----------|------------------|
| | | | | | Min | Max ¹ |
| 25° C | 50% | 2 Hours | 16 Hours | 7 Days | 16 Hours | 3 days |

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

¹If the maximum overcoat interval is exceeded then the surface MUST be abraded to ensure maximum intercoat adhesion.

SPREADING RATE ASSUMING NO LOSSES

12.2 square metres per litre equals 40 µm dry film thickness

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

DURETHANE™

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 | Very high corrosivity (AS2312.1 Cat C5) Exceeds System PUR5 | Abrasive blast clean AS1627.4 Class 2.5 | 1 st Coat Zincanode® 402 | 75 µm |
| | | | 2 nd Coat Duremax® GPE MIO | 200 µm |
| | | | 3 rd Coat Quantum® FX | 55 µm |
| | | | 4 th Coat Durethane™ Low Sheen | 40 µm |
| CONCRETE | Exterior/Interior | Remove release agents and other surface contaminants. | 1 st Coat Durethane™ Gloss | 40 µm |
| | | | 2 nd Coat Durethane™ Gloss | 40 µm |
| | | | 3 rd Coat Durethane™ Gloss | 40 µm |

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

| | |
|----------------------------|---|
| SURFACE PREPARATION | Specifiers should follow the surface preparation guidelines from the data sheet for the first coat selected. The surface must be sound and free from grease, oil, dirt, rust, loose paint and other contaminants. Degrease surface with Gamlen CA 1 detergent (according to the manufacturer's written instructions and all safety warnings) and then abrade to provide a key for the coating system. Surface must be clean and dry before application. |
| APPLICATION | Mix each can thoroughly using a power mixer until the contents are uniform. Mix the contents of both packs together thoroughly with a power mixer and let stand for 10 minutes. Remix thoroughly before application. |
| BRUSH/ROLLER | Roller application is not recommended. Apply even coats by brush of the mixed material to the prepared surface. Thin if necessary with up to 60 ml/litre with Dulux® Duthin® 540 (965-08410) to ease application. When brushing additional coats may be required to attain the specified thickness. |
| CONVENTIONAL SPRAY | Thin up to 200ml/litre with Dulux® Urethane Thinner (965-63023) to aid atomisation. Apply in multiple wet coats overlapping each pass 50%. Typical Set-up Graco AirPro: 1.4mm (239542) 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 Xtreme 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 Dulux® Urethane Thinner (965-63023) may be added to ease 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® 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. 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 that you read and understand the safety precautions on the Safety Data Sheets for the two components before use. The recommended thinner MUST be used as some solvents adversely react with the isocyanate hardener. Under no circumstances allow water or non-specified thinner to contaminate the product. |
| 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, 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 bonded 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. Always wash hands before smoking, eating, drinking or using the toilet. Gas is evolved when isocyanate in the hardener reacts with water. 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. 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
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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 5 litre packs |
| TRANSPORTATION WEIGHT | 1.05 kg/litre (Average of components) |
| DANGEROUS GOODS | Part A: Class 3 UN 1263 |
| | Part B: Class 3 UN 1263 |

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