

# POLY U<sup>™</sup> 400

#### **Description**

- A two-pack, re-coatable isocyanate cured acrylic polyurethane finish.
- Approved to APAS-1441/2, APAS-2911/1.
- Conforms to AS/NZS 3750.6 Type 1.

#### **Product Characteristics**

- · Unlimited re-coatability.
- Excellent resistance to atmospheric exposure.
- Excellent gloss retention.
- Tough, flexible and abrasion resistant.
- Resistant to splash of mineral oils, vegetable oils and aliphatic petroleum products.
- Resistant to splash of mild chemicals.

#### **Colours and Gloss**

 High opacity white, black, AS2700 colour card - full gloss

## **Recommended Film Thickness (Per Coat)**

|                                   | Minimum | Maximum | Typical |
|-----------------------------------|---------|---------|---------|
| Dry film thickness (µm)           | 40      | 60      | 50      |
| Wet film thickness (µm)           | 80      | 120     | 100     |
| Theoretical spreading rate (m²/l) | 12.2    | 8.1     | 9.8     |

## Basic Data at 25°C

| Solids content approx. | 49% by volume                              |  |  |
|------------------------|--|--|--|
| Mix ratio              | 4A:1B by volume                            |  |  |
| Touch dry after        | 2 hours (Std Part B)<br>1 hour (RR Part B) |  |  |
| Full cure              | 7 days (Std Part B)<br>6 days (RR Part B)  |  |  |

#### **Surface Preparation**

## PREVIOUS SUITABLE COAT

- Must be dry and free from chalking and contamination and sufficiently roughened if necessary.
- Oil and grease should be removed from all surfaces in accordance with AS 1627.1 solvent cleaning.
- Substrate temperature must be at least 5°C during surface preparation, application and curing and at least 3°C above dew point.
- Relative humidity should not exceed 75% during application and before the dry to handle time.

## **Application Instructions**

- Mixing ratio by volume 4A:1B.
- Mix Poly U400 Part A with Poly U400 Standard (Std) Part B or Poly U400 Rapid Recoat (RR) Part B only
- induction time none.
- Pot life at 25°C 5 hours for Standard (Std) Part B, (3 hours for Rapid Recoat (RR) Part B). Do not use after this time even if the mix is still liquid.

P50.01

- Rapid recoat Part B is not recommended for use at temperatures above 35°C.
- Stir the components and mixed product well using a mechanical mixer.
- This product must be thinned with the recommended thinner before application.
- Thinning recommendations are given as a guide and may vary depending upon substrate temperature and weather conditions.
  - The temperature of the mixed product must be above 15°C, otherwise extra thinner may be required to obtain application viscosity.
- Too much thinner will result in lower sag resistance and slower cure.
- Thinner should only be added after mixing the components.
- Freshly catalysed material should not be added to product that has been mixed for some time.
- Wattyl recommends the use of coating inspection reports in compliance with AS/NZS 3894.10,11,12 refer to Information Sheet I-20 for more information.
- For recommendations outside those contained in this data sheet, refer to Wattyl.

## **Application Methods**

|                                | AIRLESS<br>SPRAY                               | AIR<br>SPRAY                             | BRUSH/ROLLER   |
|--------------------------------|--|--|--|
| Recommended thinner            | Thinner<br>L747                                | Thinner<br>L747                          | Thinner L754   |
| Volume of thinner              | 10-20%   | 15-25%                                   | 5-10%  |
| Tip                            | 0.28-<br>0.33mm<br>(0.011-<br>0.013<br>inch)   | 1.4-<br>1.8mm<br>(0.06-<br>0.07<br>inch) | <ul> <li>Nylon/polyester<br/>or natural bristle<br/>brushes<br/>recommended.</li> <li>Recommended</li> </ul>                               |
| Fluid/<br>Atomised<br>pressure | 9.6-12.4<br>MPa<br>(1400-<br>1800 psi)<br>30:1 | 3.4-4.1<br>bar<br>(50-60<br>psi)         | roller cover should be 5-10mm woven with a solvent resistant core.  • The maximum  |
| Pump<br>Filter                 | 60 mesh  | -  | dry film thickness   |
| Hose                           | 1/4" ID<br>(6.3 mm)                            | <u>-</u>                                 | that can be achieved when brushing/rolling is 30 microns.  • Multiple coats may be required to achieve the recommended dry film thickness. |

**CLEANING SOLVENT** 

Thinner L747



POLY U<sup>™</sup> 400

## **Safety Precautions**

- Flammable. Avoid contact with heat and naked flame.
- · Avoid contact with skin and eyes.
- Use gloves, mask and goggles during application.
- Provide adequate ventilation when using in confined spaces.
- This paint contains 0.049% monomeric diisocyanate when mixed. Provide adequate ventilation during use. Breathing the vapour is dangerous. Avoid breathing of fumes. Where applied by spray, use suitable air-fed respiratory equipment/hood at all times.
- This product is intended for use in industrial situations by professional applicators in accordance with the advice given on this sheet. All work involving the use and application of this product should be carried out in compliance with all relevant Health, Safety & Environmental standards and regulations and must not be used without reference to the safety data sheet (SDS).

#### **Additional Data**

#### **OVERCOATING TABLE**

Overcoating interval for Poly U400 cured with Standard Part B when top coating with itself.

| Interval | 5°C   | 15°C   | 25°C   | 35°C  |  |
|----------|---|--------|--------|-------|--|
| Min      | 36 hrs  | 24 hrs | 16 hrs | 8 hrs |  |
| Max      | Unlimited when dry and free from any chalking and contamination |        |        |       |  |

Overcoating interval for Poly U400 cured with Rapid Recoat Part B when top coating with itself.

| Interval | 5°C   | 15°C   | 25°C  | 35°C |
|----------|---|--------|-------|------|
| Min      | 21 hrs  | 14 hrs | 8 hrs | NR   |
| Max      | Unlimited when dry and free from any chalking and contamination |        |       |      |

## **CURING AND POTLIFE TABLE**

Curing and Potlife Table for Poly U400 cured with Standard Part B.

| Paint temperature                 | 5°C     | 15°C    | 25°C   | 35°C   |
|-----------------------------------|---------|---------|--------|--------|
| Touch Dry                         | 8 hrs   | 4 hrs   | 2 hrs  | 1 hr   |
| Dry to handle                     | 36 hrs  | 24 hrs  | 16 hrs | 8 hrs  |
| Full cure                         | 16 days | 10 days | 7 days | 5 days |
| Potlife (at applicable viscosity) | 12 hrs  | 8 hrs   | 5 hrs  | 3 hrs  |

Curing and Potlife Table for Poly U400 cured with Rapid Recoat Part B.

| Paint temperature                 | 5°C     | 15°C   | 25°C   | 35°C |
|-----------------------------------|---------|--------|--------|------|
| Touch Dry                         | 4 hrs   | 2 hrs  | 1 hr   | NR   |
| Dry to handle                     | 21 hrs  | 14 hrs | 8 hrs  | NR   |
| Full cure                         | 12 days | 8 days | 6 days | NR   |
| Potlife (at applicable viscosity) | 8 hrs   | 5 hrs  | 3 hrs  | NR   |
|                                   |         |        |        |      |

<sup>\*</sup>Adequate ventilation must be continuously maintained during application and curing.

#### **Precautions**

 For recommendations outside those contained in this data sheet, refer to Wattyl.

## **Product Compatibility**

#### **PRIMERS**

- Epinamel UC230
- Epinamel PR250
- Epinamel PR360ZPS
- Epinamel DTS680
- Epinamel NS808
- Epinamel DTM985

#### **TOPCOATS**

- Poly U400
- Poly U400 Metallic
- Poly U400 Anti-Graffiti Clear

# Storage and Packaging

- Shelf life at least 12 months.
- All components shall be stored in a dry internal environment at between 5°C and 35°C.
- Packaging: 20 litre kit (16 litre Part A, 4 litre Part B)
   5 litre kit (4 litre Part A, 1 litre Part B)
- Product line: 2022.

For the most up to date information, please visit our website at <a href="www.wattylpc.com.au">www.wattylpc.com.au</a>, or contact us at Australia 132 101 (Australia) 0800 825 7727 (New Zealand).

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