

TECHNICAL DATA SHEET

UPS 604 UV Urethane Wall Coating

Two Component Water-Based Polyurethane Coating

UPS 604 UV is a high performance water based coating designed for use on external and internal wall surfaces. **MIXING**

UPS 604 UV is based on a complex blend of water-borne acrylic and urethane polymers in combination with colour stable chemical resistant pigments to provide a coating which offer outstanding weather, chemical and abrasion resistance together with excellent gloss, graffiti resistance and colour stability.

UPS 604 UV can be applied to any type of wall surface when applied in conjunction with **UPS Primers**.

Before proceeding, please read the following information carefully to ensure that the correct application procedure is fully understood.

SURFACE PREPARATION

Steel surfaces should be primed with the appropriate **UPS Primer**.

Aluminium and galvanised steel surface should be primed with the appropriate **UPS Primer**.

Concrete, brick and other masonry surfaces should be primed with **UPS 904 GP Primer**. Glazed, tiled and previously painted surfaces should be primed with **UPS 904 GP Primer**.

All primed surfaces must be clean, dry and free from oil grease and other contamination.

All primers should be applied in accordance with their product tech sheets.

UPS 904 GP Primer in accordance with the product tech sheet.

UPS 604 UV is a two component water based product, both components must be mixed together prior to use. The base components should be stirred using a variable speed mechanical mixer with the mixer set approximaetely 1000 rpm.

The activator component should be slowly added whilst continuing stirring (increasing the rpm as required) until a uniform homogeneous mix is obtained.

The mixed material must be used within 1½ hours of mixing at 20°C (68°F).

APPLICATION

Application should not be carried out when relative humidity exceeds 85% or when surface to be coated is less than 3°C above the dew point. The minimum temperature for application is 5°C.

UPS 604 UV can be applied by brush, roller or spray.

Brush: Good quality brushes should be used with even brush strokes, ensuring that the **UPS 604 UV** is not over-brushed leading to less than the specified coating thickness.

Roller: Short pile mohair rollers are the preferred equipment for this application method. **UPS 604 UV** should be spread evenly with regular checks made to ensure the correct uniform wet film thickness is achieved.

Spray: **UPS 604 UV** can be applied by conventional spray equipment, for detailed recommendation please contact the **UPS Tech Centre**.

Thinning: **UPS 604 UV** does not normally require thinning for brush or roller application, however in hot windy conditions the addition of up to 5% water can be added to aid application. The product may require thinning for spray application using up to 5% by volume of clean water.

UPS 604 UV is suitable for application by brush or roller, using good quality brushes or short to medium pile rollers.

All equipment should be cleaned IMMEDIATELY after use with **UPS Universal Cleaner**.

Theoretical Coverage Rate10 m²/litre at 50 microns dft**Recommended Film Thickness**Wet 100 microns (4 mils)
Dry 50 microns (2 mils)

Detailed working recommendations are available from the Technical Centre on request.

PHYSICAL CONSTANTS**Mixing Ratio** 3.5 parts base to 1 part activator by volume**Appearance** Base Coloured Liquid
Activator Clear liquid**Drying & Cure**

Times at 20°C	Usable Life	1½ minutes
	Touch Dry	4 hours
	Hard Dry	16 hours
	Minimum Overcoating	4 hours
	Maximum Overcoating	48 hours
	Full Cure	7 days

Volume Solids 50%**V.O.C.** 65gms/litre**Fire Performance****(Applied at recommended dft)**BS 476 Part 7 Class 1 surface spread of flame
BS 476 Part 6 Class 0 in accordance with UK
Building Regulations 1991 Approvals
Document B2/3/4 Appendix A**Shelf Life**

Use within 2 years of purchase. Store in original sealed containers at temperatures between 5°C (30°F) and 30°C (86°F).

PHYSICAL PROPERTIES

BS476 – 7 Class 1 Surface Spread of Flame	(When used in conjunction with UPS GP 830 Primer)
BS476 – 6 Class 0 in Accordance with UK Building Regulations	(When used in conjunction with UPS GP 830 Primer)
Abrasion Resistance	25mgm weight loss per 500 cycles
ASTM D4060	1kg load – CS10 Wheel
Impact Resistance	No failure 0.9kg (1.98lbs) load
BS2782-3	dropped 45cm (8 inches)
Dry Heat Resistance	100°C (212°F)
ASTM D2585	
Direct Pull Adhesion	6.2Mpa (900 psi) – steel 4Mpa (500psi)
ASTM D4541	concrete – (concrete Failure)
Pencil Hardness	HB
ASTM D3363	
UV Resistance	500 hours QUV-B no loss of gloss
ASTM G53	no colour change
Scratch Resistance	No failure 2.5kg (5.5lbs) load
BS3900-E2	

HEALTH AND SAFETYAs long as normal good practice is observed **UPS 604 UV** can be safely used.

Protective gloves should be worn.

Vapour masks should be worn for spray application.

A fully detailed **Material Safety Data Sheet** is either included with the material or is available on request.**PACKAGING**

Supplied in 4 & 4.5 litre packs

The information provided in this Product Data Sheet is intended as a general guide only and should not be used for specification purposes. The information is given in good faith but we assume no responsibility for the use made of the product or this information because this is outside the control of the company. Users should determine the suitability of the product for their own particular purposes by their own tests.



UniquePolymerSystems.com

*The Engineer's Choice**... for Solutions***Unique Polymer Systems LTD****Unit 1 Bankside Industrial Estate, Ledbury, Herefordshire, HR8 2DR****Tel: +44(0)1531 63 63 00****E Mail: sales@uniquepolymersystems.com****Web: www.uniquepolymersystems.com**