

UPS 501 LV Epoxy Coating

Two Component Solvent Free Epoxy Coating

UPS 501 LV Epoxy Coating is a high performance solvent free high build system designed for use as a corrosion resistant coating for steel and concrete structures with a minimum of surface preparation.

UPS 501 LV Epoxy Coating utilises a special blend of epoxy resins and a polyamino-amide curing system reinforced with inert pigments and inorganic fillers to produce a coating with good physical properties and corrosion resistance.

UPS 501 LV Epoxy Coating offers exceptional application and film build properties enabling high film thicknesses in a single coat to produce a system with a high degree of corrosion resistance and is ideal for ballast tanks, bridges, offshore maintenance etc.

UPS 501 LV Epoxy Coating can be applied to damp steel surfaces and offers a high tolerance to manually prepared substrates.

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

SURFACE PREPARATION

Surfaces should be clean and free from oils, bacteria or algal growth.

Steel Surfaces: optimum performance will be obtained on surfaces prepared to minimum Sa 2½ in accordance with BS 7079: Part A11989 or equivalent. Where blast cleaning is not possible, surfaces should be prepared by mechanical wire brushing, grinding or high pressure water jetting (typically 5000 psi) to achieve Swedish Standard St2-St3 taking particular care when cleaning badly pitted surfaces.

Previously coated surfaces should be abraded using 180 grade emery paper. Any loosely adherent coating must be removed and surrounding area feather edged.

MIXING

UPS 501 LV Epoxy Coating is a two component material comprising a base component and activator component which must be mixed together prior to use.

Both components should be thoroughly stirred to incorporate any slight separation prior to mixing. Whilst continually stirring the base, the activator component should be slowly added with mixing continuing until completely homogeneous.

After mixing fully, the material should be transferred to another container with the original container scraped clean into this new container and further mixing then carried out to ensure complete incorporation.

The mixed material must be used within 50 minutes at 20°C (68°F). This time will be reduced at higher temperatures and extended at lower temperatures.

APPLICATION

Application should not be carried out at temperatures below 5°C (41°F).

UPS 501 LV Epoxy Coating should be applied by brush.

Prior to full application, a small test area should be carried out to establish a technique to ensure that the correct thickness is achieved. Even brush strokes should be used to give a uniform coating thickness.

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

Theoretical Coverage Rate

2 m²/litre at 500 microns dft (21.5 ft²/litre at 20 mil dft).

Recommended Film Thickness

Wet 250 - 1000 microns

Dry 250 - 1000 microns

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

PHYSICAL PROPERTIES

Mixing Ratio 3 parts base to 1 part activator by volume.

Appearance Base Thixotropic Coloured Liquid
Activator Opaque Liquid

Drying & Cure Times

at 20°C (68°F)	Usable Life	50 minutes
	Touch Dry	12 hours
	Hard Dry	16 hours
	Minimum Overcoating	16 hours
	Maximum Overcoating	2 days
	Full Cure	7 days

Volume Solids 100%

V.O.C. Nil

Shelf Life Use within 5 years of purchase. Store in original sealed containers at temperatures between 5°C (40°F) and 30°C (86°F).

COLOURS

Available in: Grey or Black, other colours subject to minimum batch quantity. Note: Not colour stable, where a colour stable finish is required it must be over coated with an appropriate top coat.

PHYSICAL PROPERTIES

Abrasion Resistance ASTM D4060	40 mgm weight loss per 1000 cycles - 1 kg load - CS17 wheel
Impact Resistance ASTM G14	2.6 Joules (23 in lbs)
Dry Heat Resistance ASTM D2485	100°C (212°F)
Direct Pull Adhesion ASTMD4541	39Mpa (5700 psi) cohesive failure of coating – grit blasted steel
Water Vapour Permeability ASTM D1653	1.2gm.mm/m ² /24hrs
Salt Fog Resistance ASTM B117	Excellent, unaffected after 5000 hours exposure
Scrub Resistance ASTM D2486	>10,000 cycles
Humidity Resistance BS3900 Part F2	Unaffected 5,000 hours exposure
Pencil Hardness ASTM D3363	2H
Cathodic Disbondment ASTM G8	2mm 28 days at 25°C
Scratch Resistance BS 3900 Part E2	No failure 2.0kg load

HEALTH AND SAFETY

As long as normal good practice is observed **UPS 501 LV Epoxy Coating** can be safely used.

Protective gloves should be worn during use.

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

PACKAGING

Supplied in 5 and 20 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.



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