

Floorehem UV1K

It is a UV-stable high performance aqueous aliphatic polyurethane floor coating.

Product Description

Floorchem UV 1k is a complex blend based on urethane polymers, which produces systems with outstanding abrasion, impact, and chemical resistance with a high degree of flexibility and is micro-porous, allowing the substrate to breathe, unlike solvent-based systems.

Uses

- Industrial flooring
- Warehouse Floors.
- Car Park Decking.
- Residential Garages.
- Dairy and Hotel Industry.
- Non-slip ramp ways.
- Pedestrian walkways.
- Food Processing Plants.
- Helipads.
- Trafficable Roofs.
- Bridge Decks.



Salient features

- Hard-wearing yet flexible surface coating designed for the long-term protection of Industrial floors
- Outstanding abrasion, impact, and chemical resistance.
- silk sheen for maximizing light reflectivity
- Easy application, durable.
- Easy cleanability.
- Non-slip characteristics and reduction of glare.
- It is a breathable water-based system
- Hygienic, non-tainting, and UV stable.
- Micro-porous, vapour-permeable and breathable coatings.
- Nontoxic, Non-flammable, Solvent-free, and Eco-friendly.
- Waterproof and Seamless coatings.
- Available in various shades.

Product Data

Appearance / colour:	Floorchem UV 1k [R] Resin: Pigment	white liquid Colour paste
Storage conditions /shelf life	12 months from date of mfg. If stored properly in undamaged seal packaging, at a temperature between 5 °C and 30 °C. It should be kept in a cool, well-ventilated area, away from heat, direct sunlight, sparks, and children.	

Chemical Resistance

- Mineral oils, kerosene, gasoline, brake fluids, and high-octane aviation fuels.
- Most organic solvents.
- Dilute acids like hydrochloric, nitric, phosphoric, and sulphuric.
- Alkali solutions like sodium hydroxide, detergents, etc.
- Fats, oils, and sugars.

Physical properties of Floorchem UV 1k

Property	Test Method	Value and Unit
Specific gravity		1.25
Finish	CPI* 1001	Semi gloss
Surface Dry	CPI 1002	1 Hours
Hard Dry [Open for foot traffic]	CPI 1002	24 Hours
Full Cure [Vehicular Movement]	CPI 1002	72 Hours



Mechanical properties

Scrub resistance	(ASTM D2486)	greater than 10,000 cycles
Elongation	(ASTM D412)	200 %
Impact resistance	(BS 2782)	>200 Kg/cm2
Pull off Adhesion test	ASTM D 4541	Concrete Failure @ 18 Kg/cm2
Abrasion Resistance[Taber]	ADTM D 4060	50 mg loss
Humidity resistance	(BS 3900)	Unaffected 6000 hrs exposure
Water absorbtion	(CP.BM 2/67/2)	Nil
Shelf Life	-	12 months in original unopened Container when stored between 5 °C - 40 °C

Method of Application

All Chemsol Products are recommended to be applied only by Approved Applicators and should be used after using proper PPEs like Gloves, masks, goggle,s etc.

Substrate Quality

The CDS (clean, dry, sound) test must be conducted before the application of primer to the concrete substrate. The substrate must be free of all contaminants such as dirt, oil, grease, coatings, and surface treatments etc. If in doubt, apply a test area first. Prior to application, large blisters and surface breaks shall be slit and opened for the release of entrapped moisture, then cemented properly wherever necessary.

Application Conditions:



Substrate temperature: 10-40 °C



Substrate moisture content: - <5%



Relative humidity: 80%max

Application of floorchem Primer

Concrete substrates must be prepared mechanically using abrasive blast cleaning, Scarifying or grinding equipment to remove cement laitance and achieve an open textured surface. Remove weak concrete and expose surface defects such as blowholes and voids. Repairs to the substrate, filling of blowholes/voids, and surface levelling must be carried out using appropriate products. Ensure that the dust, loose and friable material is completely removed from all surfaces by brush and vacuum before application of the product.

The concrete substrate has to be primed and levelled with Chembase 150/floorchem uv 1k in order to achieve an even surface and to seal the porosity. Followed with two coats of Floorchem uv 1k. It is extremely important to ensure that the previous coat is



completely dry before application of the next coat, depending on the weather conditions. The coating should be applied evenly over the surface to ensure a regular film thickness. A final top coat is to be applied with Floorchem UV 1k. Curing time of approx. 72-120 hours (depending on weather conditions) are needed before allowing traffic or any further works.

Cleaning of Tools

Clean all tools and application equipment with Water/thinner EP140 immediately after use. Hardened and/or cured material can only be removed mechanically.

Packing

Floorchem UV 1k Resin is available in a pre-weighed kit, which is 7-8 sq.mts./kg/coat.

Handling & Safety

Keep the containers tightly sealed when not in use. Avoid skin contact and inhalation of fumes (if any). While spraying, it is advised to wear a mask. If it comes in contact with the body, wash affected parts with plenty of soap and water. In case of persistent irritation, contact a physician.

Disclaimer: The Information provided is based on our experience, thorough investigations & sophisticated testing methods, but due to the vast number of applications and usage methods, Chemsol Polymer Industries cannot accept responsibility of any kind for any particular result. It is the responsibility of the user to verify the suitability of the product for their end use and in accordance with the rules and regulations of that country /territory. All information provided pertaining to our products should be treated only as a guidance tool without any guarantee or warranty of any sort.

^{*} All CPI test methods are our scientifically designed internal test methods, which can be shared upon request.