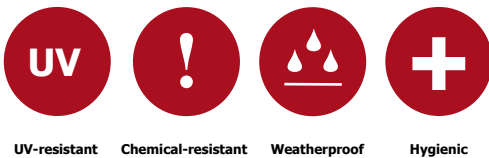


Chemdur Clear is an aliphatic solvent-based UV stable polyurethane coating.

The cured coating has excellent abrasion and chemical resistance and exhibits excellent weathering properties.

The coating is particularly effective against Skydrol and has been used extensively in the aviation industry for hangar floors and walls.



UV-resistant Chemical-resistant Weatherproof Hygienic

FeRFA Classification

Type 1

Colours

Available in a range of different colours. Please consult Colour Chart.

Appearance

Gloss or Silk finish.

Advantages

- ✓ Weatherproof (aliphatic)
- ✓ Chemical resistant protection in hostile environments
- ✓ UV resistant and UV stable
- ✓ Anti-graffiti (gloss versions)

Pack Size

2.5 and 5 kg units.

Suitable Substrates

Concrete and polymer modified cementitious screeds, plasterboards, steel surfaces.

Uses

Chemdur Clear coatings are ideal for a variety of different substrates such as concrete, render, brick, aluminium and steel. The coating is suited as a high performance finish in the following areas: industrial and commercial floors and walls, chemical process industries, protection in hostile environments, cementitious substrates.

Components

Each unit of Chemdur comprises of: one part Resin and one part Hardener.

Project References

Pedestrian Crossing for Factory Flooring in Cornwall.

VIRTUS RESINS

The Shippon, Faenol
Pentrecelyn
Ruthin LL15 2SP

Tel: 01978 790 744

Tel: 0843 289 8422

Email: info@epoxyresinsuppliers.co.uk

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Thickness

Approximately 60 - 75 µm per coat.

Chemical Resistance

Exceptional Chemical Resistance, please consult us on specific materials.

Slip Resistance

Good slip resistance.

Note: The slip resistance of a floor surface can vary as a result of the installation process, conditions at the time of application and subsequent traffic. Inappropriate cleaning or maintenance can adversely affect the performance. For further advice on potential wet areas please contact us.

Cure Schedule at 20 °C*

Working life of full packs	60 minutes
Over-coating time (minimum)	16 hours
Over-coating time (maximum)	36 hours
Light foot traffic	16 hours
Medium duty traffic	48 hours
Full Cure	7 days

If the maximum over-coating time is exceeded the coating should be mechanically abraded thoroughly and re-coated.

*The above cure times are approximate and given as a guide only. These times can vary due to prevailing site conditions. Higher temperatures will shorten working time and lower temperatures will extend cure times.

Pack Size

2.5 and 5 kg units.

Coverage (nominal 0.5 mm thickness)*

It is recommended that Chemdur Clear systems are applied in a minimum of three coats based on one coat of Chemdur Undercoat followed by two coats of Chemdur Clear Topcoat. Additional coats of undercoat or topcoat may be required depending on the nature of the substrate and the end use.

Coverage*	m ² / kg
Chemdur Undercoat (75 - 100 µm)	3 - 4
Chemdur Clear Topcoat (Gloss)	5.5 - 7
Chemdur Clear (Silk)	5 - 6.5

*Coverage figures given are theoretical. Practical coverage rates may vary due to wastage factors and the type, condition, profile and porosity of the substrate. Prevailing site conditions will also affect the coverage. It is always advisable to put down a test panel of the system if the coverage rate is in doubt, especially on a large project to assess correctly the affect of substrate porosity and texture.

Application Conditions

The ideal ambient, substrate and material temperature range is 15 - 20 °C. Localised heating or cooling equipment may be required outside this range otherwise the surface finish may be impaired. The maximum substrate and atmospheric relative humidity should be 75%.

Surface Preparation

Cementitious Substrates

All substrates must be protected by an adequate and effective DPM. Inadequate preparation will lead to loss of adhesion and failure. In coatings, there is a tendency for the finish to mirror imperfections in the substrate. For concrete substrates, grinding or light vacuum contained shot-blasting is therefore preferred over planing for these systems. Refer to the Virtus Guide to Surface Preparation.

Steel Substrates

Steel surfaces should be prepared to SA 2 ½ standard and coated immediately to prevent flash rusting.

Plasterboards

Application to plasterboards requires one coat of Strongcoat V prior application of Chemdur Topcoat.

Priming

In some cases Chemdur Clear is self-priming but is generally used as a top coat over Chemdur Undercoat.

Chemdur Undercoat

Chemdur Undercoat is a high solids solvent-based two pack aliphatic coloured polyurethane coating with excellent opacity which dries to a flat matt finish. Application rate is approximately 3 - 4 m²/kg depending on substrate porosity and profile. Due to the thin-film nature of these coatings, a test area is recommended before commencing works to determine coverage rate. See separate data sheet.

Mixing

Prior to mixing, the temperature both components should be between 15 and 20 °C. Add the hardener component to the coloured resin component and mix using a low speed electric mixer (300 - 400 rpm) for at least 3 minutes until homogeneous. Keep the mixing paddle fully submerged to avoid the entrapment of air and scrape the sides and bottom of the vessel several times.

Important: Both liquids are pre-weighed and designed to be mixed together in their entirety. It is essential that the full amounts are mixed together and until homogenous to ensure the product cures correctly and to the desired finish.

Application

Can be applied by brush, short-nap roller or spray.

Distribute the mixture immediately onto the surface using solvent resistant short nap lint-free mohair roller. Plan the work area to ensure a constant wet edge and work within the working time of the material. It is imperative that film thickness is kept constant, especially with silk coatings to maintain consistency of appearance. This should be regularly checked using a wet film thickness wheel.

Ensure that material is not applied more than once or overlapped in any area and apply in one direction only. If the thickness of the applied material is uneven, the surface may have an uneven appearance due to differences in gloss. Avoid pooling as this will lead to solvent entrapment and un-cured areas.

Technical Data

Do not apply subsequent coats until the previous coat is cured. This will depend on temperature, atmospheric humidity and degree of ventilation. Adequate ventilation and air movement is necessary. If applying by spray, suitable respiratory protective equipment should be worn by all exposed persons. Where specified, apply Chemdur Undercoat evenly at the coverage rate determined by trials. If, when cured, there are dry patches, a further coat may be required.

Pot Life

Mixed material must be used immediately. When mixed, a chemical chain reaction takes place which creates heat and further reduces pot life. High ambient temperatures will reduce pot life.

Cleaning

Regular cleaning is essential to enhance and maintain the life expectancy and appearance of the product. Chemdur Clear can be easily cleaned using industry standard cleaning chemicals and techniques. Consult your cleaning chemical and equipment supplier for more information. Silk coatings have a tendency to soil quicker than gloss coatings as the surface has a micro-texture.

Health and Safety

Refer to product Safety Data Sheet before use.

Before using this product, please ensure that you have received and read the product Safety Data Sheet. Refer to hazard labelling on the product. Wear gloves and avoid contact with skin and eyes.

Shelf Life

12 months if stored in accordance with the above recommendations.

Limitations

Do not proceed with application if atmospheric relative humidity is, or is anticipated to be, >75% or if the surface temperature is <3 °C above the dew point. Application should not commence when the substrate temperature or the ambient temperature is, or is anticipated to be <7°C during the application or within the curing period.

Technical Advice

For further information on this or any other Virtus product, please contact our office.

Note: The information contained in this document, and all further technical advice given is based on our present knowledge and experience. However, it implies no liability or legal responsibility on our part. In particular, no warranty or guarantee of product performance in the legal sense is intended or implied as the conditions of use and the competence of any labour involved in the application are beyond our control. Properties listed are for guidance purposes only. We reserve the right to make any changes according to technological progress or further developments.

Availability

3 - 5 working days. **Country of Manufacture:** United Kingdom.

You Might Also Need:

- Resin Painting Kit
- Mixing Drill Attachment
- Flowprime DPM (for damp concrete)

Virtus Resins, The Shippon, Pentre-Celyn, Ruthin LL15 2SP, England			
CE	13	DOP RV0003/5/6	
EN 13813 SR-B2,0-AR0,5-IR20 Synthetic resin screed material for use internally in buildings not subject to reaction to fire regulations			
Reaction to fire	NPD	Impact resistance (Silk)	IR8
Release of corrosive substances	SR	Impact resistance (Gloss)	IR7
Water permeability	NPD	Sound insulation	NPD
Wear resistance	AR0,5	Sound absorption	NPD
Bond strength	B2,0	Thermal resistance	NPD
		Chemical resistance	NPD

Disclaimer: FeRFa (The Resin Association) do not consider anhydrite, hemi-hydrate, and calcium sulphate screeds to be suitable for overlayment with resin floor finishes.

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