

ULTRASHIELD EPOXY

100% Solids, Epoxy Coating



MATERIAL DESCRIPTION

UltraShield Epoxy is a 100% solids epoxy floor coating system designed to offer seamless durable floor protection at applied thicknesses between 0.2-0.4mm. With excellent surface hardness and adhesion, UltraShield Epoxy exhibits high water, chemical and oil resistance with the ability to build film thickness. With the addition of anti-slip aggregates, such as Aluminium Oxide, slip resistant applications can be achieved.

AREAS OF APPLICATION

UltraShield Epoxy is suitable for use in a wide variety of industrial, commercial and residential applications. It can be used to provide a high gloss hygienic finish or a slip resistant finish. UltraShield Epoxy can be used in, but is not limited to, the following areas of application:

- Garages and sheds
- Warehouses with high density traffic
- Multi-level car parks
- Car production and workshop facilities
- Chemical industries
- Industrial environments
- Showroom and offices
- Pharmaceutical and cosmetic facilities
- Water and sewerage treatment plants
- Electronic and electrical industries
- Food and drink processing plants

USES

- Concrete protection
- Different flooring applications, i.e.
 - ✓ Solid Colour Epoxy
 - ✓ Flake Coating Systems
 - ✓ Metallic and Liquid Epoxy Marble Floors
- Recoat and maintenance
- Wear resistant coating
- Epoxy mortar binders – coving and falls to drains
- Epoxy primer coat

CHARACTERISTICS AND BENEFITS

- Excellent wear and abrasion resistance – long term floor protection
- Good chemical resistance – can be used for chemical spillage areas
- Easy to clean and maintain
- Shrink free
- Easy application by brush, roller or squeegee enables faster completion
- Excellent levelling capacity when used as skim or scratch coat
- Smooth and glossy finish with wide range of colours – attractive & aesthetically pleasing floors

PROPERTIES

Colour	Range of colours	
Mix ratio (by volume)	(A:B) 3:1	
Mixed density	1.5kg/L	
Application temperature (ambient & substrate)	MIN	MAX
	8°C	Max 35°C
Overcoating Time	12hrs	48hrs
Curing Times	INITIAL	FULL
	24hrs	7 days

CHEMICAL RESISTANCE

UltraShield Epoxy resistance to many common chemicals in spill or splash situations at ambient temperatures. Consult Ultrakote for any specific applications. Some chemicals may cause staining or discolouration, on the surface, from prolonged exposure without impacting the coating's integrity

- Hydrochloric acid (10%)
- Nitric acid (10%)
- Sulfuric acid (40%)
- Uric acid (concentrated)
- Sodium hydroxide (10%)
- Hydrogen peroxide (3%)
- MEK
- Skydrol
- Brake/Hydraulic Fluid
- Toluene
- Grease
- Organic Food Matter
- Wine
- Diesel
- Motor Oil
- Hydrocarbon solvents

ULTRAKOTE

PREMIUM GRADE PROTECTIVE COATINGS

- Kerosene
- Turpentine

Data is available on request. Exposure based on spill and splashes that were cleaned within 24hrs.

PERFORMANCE DATA

Pot life	Approx. 45 minutes
Max. service temperature	60°C
Flexural strength(ASTM C580)	40N/mm ²
Tensile strength (ASTM C307)	20N/mm ²
Bond strength BS 1881 Part 207	>1.5N/mm ²

Laboratory tests carried out at 25°C

APPLICATION

Allow new concrete to cure for a minimum of 28 days prior to any coating. Surface must be sound, dry, free from all loose material, laitance, old coatings, dust and surface contaminants (e.g. oil, grease, chemicals, release/curing agents etc). Substrate must be mechanically treated by abrasive blasting or grinding for mechanical bonding. Oily surfaces must be degreased and removed. Prior to the application of UltraShield Epoxy, moisture content in the concrete must be no greater than 4% pbw. Using a moisture barrier coat, before any system application, will ensure no rising moisture or dampness will affect the coating. Concrete to be min 25Mpa compressive strength and 1.5Mpa pull off strength.

POT LIFE

Pot life will vary depending on the ambient temperature, quantity mixed and placed.

Approximately 30 Minutes at 20 Degrees

CURING

Cure time depending on ambient/substrate temperatures. UltraShield Epoxy will cure to a tack free surface within 8 hours at 23°C, is overcoatable after 12 hours (however not more than 48) and should be protected from traffic/spillage for at least 36 hours. Full chemical and mechanical resistance is obtained after 7 days @ 23°C.

LEGAL

This data sheet is to provide information on the product based on current knowledge. It does not constitute a guarantee and we recommend that testing should be undertaken to ensure that the final result is satisfactory for the intended application. The quality of the product is guaranteed under our General Conditions of Sale.

The information, and, in particular, the recommendations relating to the application and end-use of UltraKote products, are given in good faith based on UltraKote's current knowledge and experience of the products when properly stored, handled and applied under normal conditions in accordance with our recommendations. In practice, the differences in materials, substrates and actual site conditions are such that no warranty in respect of merchantability or of fitness for a particular purpose, nor any liability arising out of any legal relationship whatsoever, can be inferred either from this information, or from any written recommendations, or from any other advice offered. The user of the product must test the product's suitability for the intended application and purpose. UltraKote reserves the right to change the properties of its products. The proprietary rights of third parties must be observed. All orders are accepted subject to our current terms of sale and delivery. Users must always refer to the most recent issue of Product Data Sheet for the product concerned, copies of which will be supplied on request.

The user is responsible for checking the suitability of products for their intended use and for ensuring that the application and use of the product is in accordance with the manufacturer's guidelines and recommendations. Suggestions made by UltraKote Australia either orally or in writing may be followed, modified or rejected by the owner, engineer or contractor since they, and not UltraKote, are responsible for carrying out procedures appropriate to a specific application.

ESTIMATING DATA

Over dense surfaces, the coverage rate is 5m² per litre per coat. On more porous surfaces or in non-skid textures, typical coverage rate is 4m² per litre per coat.

UltraShield Epoxy wet film thickness				
L	Thickness in mm/m ²	m ³	Pails /m ³	m ² /mm thickness
20	20mm	(0.02)	50	20 m ²

PACKAGING

UltraShield Epoxy is supplied in 8L and 16L pigmented and unpigmented kits comprising:

8L Pretinted	8L + Pigment	16L Pretinted	16L + Pigment
6L Part A	5.5L Part A	12L Part A	11L Part A
2L Part B	2L Part B	4L Part B	4L Part B
	0.5L Pigment		1L Pigment

NOTE: Where Dark, light or vibrant colours, (Black/white or Red/Yellow etc.) are required, the addition of extra colour packs are advised to ensure opacity. A third coat is also recommended UltraShield Epoxy may change in appearance when exposed to UV light.

CLEANING

Use thinners to clean equipment and tools before the material hardens. Cured material can only be removed mechanically.

SHELF LIFE

UltraShield Epoxy can be stored in tightly closed original containers for 12 months in controlled environments.

PRECAUTIONS

For the full health and safety hazard information, make sure that you obtain a copy of the Material Safety Data Sheet (MSDS) from our office or website.

VERIFIED DISTRIBUTORS OF ULTRAKOTE

[Sydney Industrial Coatings](#)

[Vinyl Flakes Australia](#)