

FEATURES

Advantages:

- Ultra-High Build – 0.8mm to 2 mm in a single coat
- Positive cure, even at low temperatures
- Abrasion resistant
- Unique flexibilised formulation imparts excellent impact resistance
- May be used on buried structures, structures immersed in fresh or salt water, and for atmospheric exposure
- Suitable for use with cathodic protection systems – impressed current or anode types
- Low density of 1.09 – heavy duty protection with minimal added weight
- Thermal insulation qualities minimise surface condensation problems on cold surfaces or heat loss from warm cargo spools etc.
- Easy application qualities using properly set up standard heavy-duty airless spray equipment

Performance Data:

Adhesion & Cohesion – > 1000 psi

Intercoat adhesion (1 year between coats) – > 1000 psi

Impact Resistance – Excellent

Cathodic Disbondment:

AS/NZS 4352:1995 Test Cell A (concentric pot) ≅
 ASTM G8-90: Benchmark Accelerated Test – 9mm Ø
 'holiday', aqueous electrolyte (1% NaCl, 1% Na₂SO₄,
 1% Na₂CO₃) 3000mV at 25°C for 90 days – 1500
 micron film.

No effect on adhesion, no undercutting, no blistering.

RECOMMENDED USES

Altra~Max UHBE is a two component proprietary-modified high solids, heavy duty epoxy coating designed for application to system film thicknesses ranging from 800 microns through to 3 millimetres (3000 microns).

Altra~Max UHBE may be applied using industry-standard airless spray equipment of sufficient capacity.

Altra~Max UHBE is suitable for service in immersion, on buried structures, and on high wear surfaces in atmospheric exposure.

Altra~Max UHBE is recommended for severe environments such as:-

- Offshore oil and gas platforms
- Wharf piles
- Buried LPG bullets
- Work decks – with or without broadcast aggregate
- Mining industry slurry tanks
- Equipment protected by cathodic protection; either impressed current or sacrificial anode – buried or immersed in water
- Sewage and Waste Plants

Approval:

AS 4020:2005

For use as Potable Water Lining to tanks and pipes at surface area to volume ratio - 9600mm² / litre (9.6m² / 1000 lt)

SPECIFICATION DATA

Coating Type:	Proprietary phenalkamine cured ultra-high build epoxy coating
Colour:	Pale Beige
Packaging:	18 litre – two component kit
Mix Ratio:	2:1 by volume
Gloss:	Textured sheen
Flash Point:	27 °C Setaflash
Thinner:	10/90 Preparation solvent or Denatured Alcohol
Pot Life:	1 hour at 25 °C
Induction Time:	5 minutes with thorough mixing
Storage:	Store under cool dry conditions (liquid only)

Density:	1.07 kg per mixed litre (1.09 kg/litre cured)			
VOC:	65 gm per litre			
Temperature Resistance:	120°C dry			
Volume solids (mixed):	95			
Theoretical Coverage Rate:	0.95 m sq. metres per litre at 1000 microns dry			
Recommended Film Thickness Per Coat:	1052-2104 microns wet to obtain 1000-2000 microns dry			
Application:	Spray, Brush or Roller			
Dry Times (1500µm DFT / 50% RH):				
Touch dry:	4 hours			
Recoat – minimum:	5°C	10°C	25°C	30°C
Self	48 hrs	24 hrs	12 hrs	12 hrs
Epoxy	48 hrs	24 hrs	12 hrs	12 hrs
Recoat – maximum:	5°C	10°C	25°C	30°C
Self	336 hrs	336 hrs	336 hrs	240 hrs
Epoxy	336 hrs	336 hrs	336 hrs	240 hrs

SURFACE PREPARATION

All surfaces to be coated should be clean, dry and free from contamination. Oil or grease should be removed in accordance with AS1627.1 solvent cleaning. Surface defects revealed by the preparation process, should be ground, filled, or treated in the appropriate manner. Clean to remove all grit dust and debris and ensure the surface is dry.

Steel Surfaces:

Abrasive blast to AS1627.4 Class 3 for immersion service and for non-immersion to AS1627.4 Class 2 ½ to achieve a uniform blast profile between 60 to 90 microns and be of a jagged nature as opposed to a peen pattern. A lesser degree of cleaning will reduce the service life of the coating. Apply primer coat to the cleaned surface to prevent re-rusting or contamination.

Concrete surfaces:

Sweep abrasive blast or high pressure water blast to remove all laitance and render a roughened surface similar to that of 60 grit sand paper.

For maximum performance, by both strengthening the surface concrete and reducing the incidence of porosity pinholes, we recommend pre-conditioning the prepared concrete with Ultra-Lock 577 penetrating sealer.

DIRECTIONS FOR USE

Mixing:

Ultra-Max UHBE is supplied in 18 litre two component kits consisting of 12 litres of Base and 6 litres of Converter. Before combining Base and Converter thoroughly power stir, using a folding rather than beating action, the Base component to a uniform consistency. With the Base mixed add the Converter under continuous agitation and continue to power mix for 5 minutes. After complete and thorough mixing for 5 minutes the material should have a totally uniform colour and texture. After mixing no further induction is required. The mix ratio is 2:1 (Base: Converter) by volume. Where possible always mix complete kits.

Thinning:

Under normal circumstances Ultra-Max UHBE does not require thinning. In cold conditions, or when using under-capacity spray equipment, very sparing thinning may be necessary. We do not recommend the addition of more than 2% v/v of 10/90 Preparation Solvent or Denatured Alcohol (less than 360 ml / 18 litres). A very small amount of thinner gives a large drop in viscosity that may adversely affect wet film build.

Clean-up:

Use methyl ethyl ketone (MEK). Run pump in re-circulation mode to fully flush out any fines.

Application:

Airless Spray only: Use a high capacity pump with a minimum 45:1 ratio (56:1 preferred) and a gravity feed hopper with a 45mm (1 ¾") feed pipe to the pump.

The high pressure delivery line should be at least ½" (12mm) ID and preferable no longer than 15 metres terminated with a 1 metre 3/8" (9.5mm) whip hose.

The gun should be a high pressure and capacity unit with a full flow tip (baffle bars impede flow).

Tip orifice range 0.029" to 0.037". Pressure 3500-4000 psi. All in-line filters should be removed.

Ventilation:

Since solvent vapours are heavier than air, ventilation ducts should reach to the lowest portions of any enclosed areas as well as into any structural pockets. Ventilation should be provided throughout the cure period to ensure all of the solvents are removed from the coating.

PRECAUTIONS

For industrial use only. See the Altex Coatings Limited General Safety Data Sheet, product label and Material Safety Data Sheet (MSDS) for health and safety information prior to use.

Ultra-Max UHBE is flammable. Keep away from heat, sparks and open flame. Use with adequate ventilation. May cause eye and skin irritation. Do not breathe vapour or spray. Wear suitable protective clothing such as gloves and eye and face protection.

ALTEX COATINGS LIMITED

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