

### **Epoxy Resin Mortar and Primer System**

#### **Information**

**Ultracrete EP-R9** is a high strength two part epoxy resin mortar and primer system, containing a blend of specialist sands and fine fillers to provide exceptional strength, bond and chemical resistance, accommodating depths from 5mm – 50mm.

### **Preparation**

As with all concrete repairs it is vitally important to remove all grease, oil, dust and other loose materials. Smooth substrates must be mechanically roughened e.g. by scabbling or needle gun.

### **Priming**

The supplied primer should be used to prime surfaces before the application of **Ultracrete EP-R9**. Mix all the contents of primer A and B thoroughly. Brush the mixed contents well into the prepared surface taking care to avoid "puddling" in depressions. **Ultracrete EP-R9** should be applied when primer has started to gel, but still has surface "tack".

**Note:** The primer should be applied to the areas to be repaired within 10 minutes. Unused material will generate heat, therefore care must be taken when handling the material

#### **Mixing**

Small quantities can be easily mixed by gloved hand; it is advisable to employ a forced action mixer for larger quantities. Lightly spray the solvent provided in the pack onto mixing tools in order to avoid material sticking. Thoroughly mix the buff coloured **Ultracrete EP-R9** base and dark grey coloured hardener, to produce a cohesive grey coloured trowelable mortar.

### **Placing**

The mixed material should be applied firmly into the primed surface to ensure positive adhesion, paying particular attention to edges and thin sections. The surface may be closed using a steel trowel.

#### Cleaning

Use supplied solvent for cleaning the tools and equipment after use.

#### **Precautions**

The cleaning solvent is flammable. Do not use near a naked flame or smoke during use. Flash point 38°C.



# Features & Benefits

**Ultracrete EP-R9** is a high strength, two component epoxy, resin mortar. Ideal for fast and permanent concrete repairs. Will accommodate depths from 5-50mm.

- Chemical resistant.
- High strength.
- Build from 5-50mm.
- Waterproof.
- Speedy to apply.
- Reduced risk of site errors .
- Manufactured under a Quality Management System BS EN ISO 9001: 2000.

#### Recommended Applications

Bonding coping stones, arris repairs, bedding granite setts and for concrete repair for floors that are subject to heavy wear and tear.

### **Related Products**

Ultracrete EP-R9

Contractors Pack available for larger projects.

## **Health & Safety**

Resin components have a flash point in excess of 100°C. Keep containers closed when not in use.

Cleaning solvents should not come into contact with skin or eyes. Avoid inhalation of fumes and work in well-ventilated areas.

The use of barrier creams, protective clothing including gloves, goggles and facemask are recommended.

**Ultracrete EP-R9** can be removed from the skin by using a suitable cleansing cream, soap and water. If swallowed do not induce vomiting, seek immediate medical attention. Keep out of the reach of children.

# General Properties - Ultracrete EP-R9 (formerly known as Cembuild EP-R9)

Test	Ultracrete EP-R9
Pot Life at 20°C	30 Minutes
Initial Hardness	1 hour
Full Cure, Days at 20°C	7 days
Minimum Application Temperature	5°C

# Low Temperature Results (5°C - 24 Hours)

Test	Ultracrete EP-R9 (5°C - 24 Hrs)
Compressive Strength, N/mm <sup>2</sup> BS6319: Part 2: 1983	24

# Mechanical Properties – Ultracrete EP-R9 (formerly known as Cembuild EP-R9)

The following results were obtained at a Base/Hardener mix ratio of 2:1 at 20°C when tested independently by Messer's Sandberg in the UK. (Report No. 5).

Product	Ultracre	te EP-R9	Typical Concrete
Property/Test Age	24 Hrs	7 Days	28 Days
Compressive Strength, N/mm <sup>2</sup> BS6319: Part 2: 1983	38	75	30
Flexural Strength, N/mm <sup>2</sup> BS6319: Part 3: 1983	-	22.4	5
Tensile Strength, N/mm² BS6319: Part 7: 1985	14.3	15.6	3
Bond Strength, N/mm² (Slant Shear Method) BS6319: Part 2: 1983	45	-	-
Density of Hardened Material, Kg/m³ BS6319: Part 5: 1984	2050	2070	2260
Compressive Modulus, KN/mm² BS6319: Part 6: 1984	-	11.2	20
Flexural Modulus, GN/m <sup>2</sup> BS6319: Part 6: 1990	-	10.8	-

# Chemical Resistivity – Ultracrete EP-R9 (formerly known as Cembuild EP-R9)

Water		Excellent
Hydrochloric Acid	25%	Excellent
Nitric Acid	8%	Good
Acetic acid	5%	Good
Tartaric acid	10%	Excellent
Citric acid	10%	Excellent
Lactic acid	10%	Very good
Phosphoric acid	10%	Very good
Sodium hydroxide	50%	Excellent
Sugar solution		Very Good
Ethanol		Very Good
Diesel fuel/petrol		Very Good

Unit/Packaging	Ultracrete EP-R9 is supplied in 10kg or 22kg plastic tubs containing a
	two component hardener and primer system. The 10kg pack is supplied
	with 1 x 20mm brush, a solvent spray bottle and a pair of protective
	gloves. The high strength resin mortar will achieve depths of 5-50mm.

Hand Pack Containing (10kg)	
2 x 3kg Base Packs	2 x 2kg Hardener Packs
1 x 140ml Primer Resin (A)	1 x 70ml Primer Hardener (B).
1 x 20mm Brush	1 x Pair Poly Gloves
1 x Solvent Spray Bottle	
EP-R9 Mortar Coverage	1.1m² at 4mm
EP-R9 Mortar Yield	4.8 Litres
EP-R9 Primer Coverage	1m² R9 Primer
Yield	0.210 Litres

Contractors Pack: (larger projects)		
Approximately 22kg Poly Bucket	Gloves, Solvent, Brushes, not included.	
EP-R9 Mortar Coverage		
EP-R9 Contract Mortar Yield	9.5L	
EP-R9 Primer Coverage		
EP-R9 Contract Primer Yield	0.6L	
Shelf Life	Store in a cool dry place at temperatures between 5°C – 25°C. Shelf life in correct conditions for sealed tubs is 6 months.	

For updated Material Safety Data information visit www.instarmac.co.uk

#### **Contact us**

