

Solvent free, three component epoxy based tile adhesive and grout with high abrasion, water and chemical resistance

DESCRIPTION

Quickmast EP200 is a high performance, solvent free epoxy based tile adhesive and grout consists of three pre-weighted components of epoxy resin, harder and selected filler that when mixed together produce an easily workable paste for permanent installation of all types of tiles and natural stone as well as grouting joints between tiles in internal external and submerged conditions.

The exceptional chemical resistance characteristic of Quickmast EP 200 makes it ideally suitable for industrial applications or when high hygienic features are requested such as in hospitals and food processing plants.

APPLICATIONS

Quickmast EP200 is suitable for indoor, outdoor and submerged use in application areas such as:

- » Swimming pools.
- » Laboratories.
- » Kitchens.
- » Dairy industries.
- » Meat poultry and food processing plants.
- » Hospitals.
- » Abattoirs.
- » Pharmaceutical plants.

ADVANTAGES

- » High chemical resistance.
- » High abrasion resistance.
- » High slip resistance, for demanding vertical tiling.
- » High bond strength.
- Mould and stain resistance.
- » Water impermeable.
- >> Fast setting.
- » Suitable for all ceramic tiles and stones.
- » Suitable for internal, external and submerged conditions.
- Excellent bond adhesion strength to polyurethane waterproofing membranes (Aquathane Range from DCP).
- » Available in a wide range of colours.

STANDARDS

As a tile adhesive:

» Quickmast EP200 complies with ISO 13007-1 and BS EN 12004 specifications, Class R2T.

As a tile grout:

» Quickmast EP200 complies with ISO 13007-3 and BS EN 13888 specifications, Class RG.

TECHNICAL PROPERTIES:

Pot life: 40 - 60 min @ 25°C 20 - 40 min @ 35°C

Mixed density: $1.65 \pm 0.1 \text{ g/cm}^3$

Open time, tensile

adhesion strength: ≥ 2.5 MPa after 20 min

ISO 13007-2, 4.1

Compressive strength: ISO 13007-4, 4.1.4 ≥ 50 MPa

Shear adhesion strength: ISO 13007-2, 4.3.4 ≥ 2.0 MPa

Shear adhesion strength: ≥ 2.0 MPa

ISO 13007-2, 4.3.5 (after water immersion)

Shear adhesion strength: ≥ 2.0 MPa

ISO 13007-2, 4.3.8 (after thermal shock)

Abrasion resistance: ISO 13007-4, 4.4 ≤ 150 mm³

Water absorption: < 0.1 g

ISO 13007-4, 4.2 (after 240 min)

Shrinkage: < 1.5 mm/m

Compressive strength: ISO 13007-4, 4.1.4 ≥ 45 MPa @ 7 days

Flexural strength: ISO 13007-4, 4.1.3 ≥ 30 MPa

Initial setting time: ASTM C308 5 hr @ 25°C

Full chemical cure: 7 days

Minimum application temperature: 5°C

Service temperature: -20 to 100°C

VOC: < 50 g/ltr

ASTM D2369 (comply with LEED)



METHOD OF USE

SURFACE PREPARATION

1) As a tile adhesive:

- Substrates should be clean and free from dust or any contamination.
- Steel surfaces shall be free from rust or other contaminants, ideally grit blasted to a near white finish in accordance to Swedish standards SA 2½.
- » Surfaces should be dry before tiling.

2) As a tile grout:

- » Joint surfaces should clean and free from dust or any contamination.
- Joints should be cleaned to the full thickness of the tile or to a minimum depth of % of the tile thickness.
- » Joints should be dry before grout filling.

MIXING

To ensure proper mixing, a mechanically powered mixer or drill fitted with a suitable paddle should be used. Stir the base and the hardener individually to disperse any settlement.

The entire contents of the base and hardener should be poured into a suitable size container and mixed mechanically for 2 minutes. Add the filler to the base/ hardener mixture and mix for another 3 minutes until a uniform colour is achieved.

PLACING AND FINISHING

1) As a tile adhesive:

Spread the mixed adhesive to the substrate using a notched trowel. Apply with pressure a 1 to 2 mm coat with pressure using the flat face of the notched trowel onto the substrate.

Comb diagonally additional mixed adhesive up to a 3 mm total maximum thickness with the notched side of the notched trowel. Do not apply large areas of adhesive that cannot be covered within the open wet time of the adhesive.

2) As a tile grout:

Use a masking tape on joint edges to protect tiles. Fill the mixed grout into the joints using rubber trowel or by using hand operated gun and cartridges. Excess grout should be cleaned with a proper wet cloth within the material pot life.

Note: When used as an epoxy tile grout, exposure to direct sunlight may cause gradual yellowing or discoloration.

CHEMICAL RESISTANCE

ISO 13007-2:2010 after submersion in the following chemicals:

	After 7 days full immersion	After 28 days full immersion
Ammonia 10% - Liquid	R	R
Citric Acid 10%	R	R
Hydrochloric Acid 10%	R	R
Nitric Acid 10%	R	RS
Oleic Acid	R	SS
Phosphoric Acid 37%	R	R
Sulfuric Acid 10%	R	R
Vinegar 5%	R	R
Potassium Hydroxide 50%	R	R
Diesel Fuel	R	R
Kerosene	R	R
Distilled water	R	R
Chlorinated water	R	R
Sea water	R	R
Xylene	SS	SS

R: Resistant

RS: Resistant with slight discoloration

SS: Slight softening

WORKING CONDITIONS

Quickmast EP200 should not be applied at temperatures below 5°C.

CLEANING

Cleaning should be commenced immediately before the grout reaches initial setting.

PACKAGING

Quickmast EP200 is available in 6 kg packs (3.6 ltr) and 12 kg packs (7.2 ltr).

YIELD

As tile adhesive: 1.65 kg/m² @ 1 mm thickness. As grouting: The approximate yield of the grout can be calculated as per the following equation:

Yield (m²/kg) =
$$\frac{5.1}{\text{WD } (0.02 + \frac{1}{L} + \frac{1}{H})}$$

Where:

L: Tile length (cm)
H: Tile width (cm)

D: Average joint depth (mm) W: Average joint width (mm)

Note: Grout yield is subject to ± 15% tolerance.

STORAGE

Quickmast EP200 has a shelf life of 12 months from date of manufacture if stored at temperatures between 5°C and 35°C in original unopened pack.

If these conditions are exceeded, contact DCP Technical Department for advice.

CAUTIONS

HEALTH AND SAFETY

Quickmast EP200 should not come in contact with skin and eyes, or be swallowed. Ensure adequate ventilation and avoid inhalation of vapours.

Wear suitable protective clothing, gloves and eye protection. If working in confined areas, suitable respiratory protective equipment must be used. The use of barrier creams provide additional skin protection.

In case of contact with eyes, rinse immediately with plenty of clean water and seek medical attention immediately.

For further information, refer to the Material Safety Data Sheet.

FIRE

Quickmast EP200 is nonflammable.



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- » Concrete admixtures.
- » Surface treatments
- » Grouts and anchors.
- » Concrete repair.
- » Flooring systems.
- » Protective coatings.
- » Sealants.
- » Waterproofing.
- » Adhesives.
- » Tile adhesives and grouts.
- » Building products.
- » Structural strengthening.

