

**Self-Leveling Epoxy Overlay**

**DESCRIPTION** • *EpoCrete 2000* is a three-component, self-leveling, high build, solvent-free epoxy resin floor overlay system formulated of pure epoxy resin and well-graded silica to provide high impact and abrasion resistance with self-leveling properties. *EpoCrete 2000* is applied in 2-3 mm thickness over concrete surfaces to provide a glossy, colored, attractive, yet very tough and seamless epoxy flooring.

*EpoCrete 2000* is available in a wide range of colors.

**USES** • *EpoCrete 2000* is suitable where a high build, heavy duty, chemically resistant and hard-wearing coating is required. Application areas include but are not limited to car parking, traffic decks, heavy vehicle maintenance facilities, factories, workshops, dairies, soft drinks production and bottling plants, kitchens, showrooms, water treatment plants, central cooling stations and other areas with chemical spillage.

*EpoCrete 2000* is used as the final protective coating for concrete floors where a non-skid coat with high impact resistance is desirable.

**ADVANTAGES** •

- ✓ Easy to apply by trowel.
- ✓ High impact resistance.
- ✓ Hard wearing and abrasion resistant.
- ✓ Low maintenance costs.
- ✓ Provides a hygienic, impervious finish.
- ✓ High chemical and oil resistance.
- ✓ Available in wide range of colors.
- ✓ Easy to clean.
- ✓ Solvent free.
- ✓ Glossy finish surface.
- ✓ High build: up to 3 mm thickness.

**LIMITATIONS** • New concrete surfaces must be allowed to fully cure for a minimum of 28 days. NOT SUITABLE FOR OUTDOOR APPLICATIONS - UV radiation will cause discoloration.

**PHYSICAL PROPERTIES** •

Mixed Density	1.99 ± 0.05
Solids Volume	100%
Application Temperature	12°C to 40°C
Pot Life	30 minutes @25°C
Tack Free Time	10-12 hours at 25°C 6-8 hours at 35°C
Initial Hardness	24 hours at 20°C 16 hours at 35°C

Minimum Service Temp.	10°C
Maximum Service Temp.	80°C
Shore D Hardness ASTM D 2240	90
Pull-off ASTM D 4541-85 (On Concrete)	> 2.2 MPa (Cohesive Failure)
Tensile Strength ASTM D 638	25 MPa
Flexural Strength ASTM D 638	45 MPa
Compressive Strength ASTM C109	90 MPa
Abrasion Resistance ASTM D 4060 – 85, CS – 17 wheels at 0.5 kg load	100 cycles: 3.0 mg 500 cycles: 14 mg 1000 cycles: 27 mg
Flash Point	Non-flammable

**CHEMICAL RESISTANCE** • Fully cured *EpoCrete 2000* samples have been tested for chemical resistance to the following chemicals for 7 days @ 25°C:

- |                        |               |
|------------------------|---------------|
| • Gasoline             | Excellent     |
| • Petrol               | Excellent     |
| • Diesel               | Excellent     |
| • Engine Oil           | Excellent     |
| • Brake Fluid          | Excellent     |
| • Sod. Hydroxide (20%) | Excellent     |
| • Sulfuric Acid 50%    | Discoloration |
| • HCl 50%              | Discoloration |
| • Acetic Acid 10%      | Excellent     |
| • Lactic Acid 10%      | Excellent     |

**COVERAGE** • Application rate will vary according to surface conditions and profile, application technique and job conditions. Theoretical coverage rate of 5.5 sq m per 22 kg/11-liter pack at 2 mm is dominant.

**SURFACE PREPARATION** • All concrete surfaces must be fully cured for a minimum of 28 days, sufficiently rigid, and clean of any surface contamination such as oil, dirt, grease, coatings, curing compounds, and laitance that may prevent proper adhesion. Dense, smooth surfaces, and those retaining excessive amount of form release agent can cause delamination from the base. Any painted or coated surfaces should be sandblasted and/or grinded to remove existing coatings. Use of detergents or soap is not recommended as they may leave a film that can cause bonding failure. The substrate should also be visibly dry. Concrete slabs, on or below grade, must have an efficient

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moisture/vapor barrier placed by the general contractor directly under the slab.

The concrete substrate should preferably be steel trowel finished. The surface must be prepared mechanically by grinding or shot blasting to achieve a rough profile and remove laitance, curing agents, and contaminants.

Use mechanical grinding along with patching to achieve the required surface level. Use only epoxy-based products for patching such as *MortCrete 3000 Multi-purpose Epoxy Mortar* and/or *EpoCrete 5000 Epoxy Screed*; cement-based patching products may require proper curing time before the coating can be applied.

Damaged areas, surface irregularities, and cracks must be repaired with *MortCrete 3000 Multi-Purpose Epoxy Mortar* prior to application. Remove all unsound concrete. Patches shall be flush with the surrounding surface and shall match the texture of existing surfaces.

Surrounding areas should be covered and protected from material spills and equipment contact. Rope off work area, remove surrounding vehicles, and close off to traffic.

**MIXING** • The entire contents of the hardener container should be poured into the base container and the two materials mixed thoroughly for at least 3 minutes. Use a heavy duty slow speed power drill with a jiffy mixing blade. Mix the two components in the quantities supplied taking care to ensure hardener container is scraped clean. Do not add solvent thinners at any time.

**APPLICATION** • Priming is recommended for concrete surfaces by using *EpoPrime EP1* or equivalent. *EpoCrete 2000* must be applied while the primer surface is still tacky. *EpoCrete 2000* may be applied by trowel or a gauge rake; use of a spiked roller is also recommended. Allow the material to set still in order to self level.

**CLEANING** • Tools and equipment must be cleaned with an organic solvent such as *SolvCrete 100*.

**STORAGE & SHELF LIFE** • Product should be stored at 25°C in dry conditions away from direct sun light. Shelf life is approximately 12 months from date of purchase in original unopened container at specified storage temperature.

**SAFETY PRECAUTIONS** • The application of material should be under good ventilation. Avoid inhalation of the vapors. Use goggles and vinyl gloves. In case of contact with eyes, rinse immediately with plenty of clean water, do not use solvent and seek medical attention immediately.

The product complies with environmental and occupational health & safety standards ISO 14001 and OHSAS 18001.

**PACKAGING** • 22 kg (11 L) three-part pack (includes base, hardener and filler components).