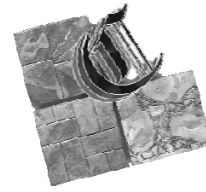


# FlexCrete 500

## Epoxy Polysulfide Protective Coating For Sewage Tanks



**DESCRIPTION** • *FlexCrete 500* is a two component epoxy polysulfide protective coating. The incorporation of polysulfide polymers into the backbone of the epoxy chain prevents the age hardening of epoxy coating. *FlexCrete 500* is suitable for applications where abrasion and chemical resistance are required.

**USES** • *FlexCrete 500* has been manufactured as a protective coating where chemical resistance is required, such as in sewage water tanks, silos, manholes, waterproofing of concrete pile heads, basements, and other above and below ground structures.

**COMPLIANCE** • *FlexCrete 400* complies with BS 6920 Part 1-2000 and ASTM C957-1998.

### ADVANTAGES •

- ✓ Solvent free.
- ✓ Does not require priming.
- ✓ Liquid applied.
- ✓ Provides a seamless coating.
- ✓ Flexible with crack bridging ability up to 2 mm.
- ✓ Resistant to a wide range of chemicals.
- ✓ High bond strength to a variety of substrates and building materials.
- ✓ Excellent abrasion resistance.
- ✓ Easy to apply with roller, brush or airless spray.
- ✓ Tolerates a wide range of temperatures.

**LIMITATIONS** • Never apply to new concrete surfaces before they have been allowed to cure for a minimum of 28 days. *FlexCrete 500* is only a fine coating; it should not be used to fill cracks or holes in the surface. *FlexCrete 500* must be applied at a minimum dry film thickness (DFT) of 500 microns.

### PHYSICAL PROPERTIES •

Mixed Specific Gravity	1.35 ± 0.05
Volume solid	100%
Pot life at 25°C	50 ± 5 mins.
Tack Free Time at 25°C	5 – 6 hours
Tensile Strength, (ASTM D-412)	6.5 N/mm <sup>2</sup>
Elongation % (ASTM D-412)	35%
Shore D hardness (ASTM D 2240)	46
Tear Resistance (ASTM D 1004)	11 N/mm
Bond Strength (ASTM C-4541)	
Concrete	2.0 MPa (C.F.)
Steel	3.5 MPa (C.F.)
Abrasion Resistance (ASTM D4060-95, 1000 cycles)	80 mg

Resistance to Hydrostatic Pressure (DIN 1048)	
Positive	>15 bar
Negative	> 12 bar
Crack Bridging Capacity (ASTM C 386)	2.5 mm
Service Temperature After Full cure:	
Dry Condition	-2°C up to 80°C
Wet Condition	-2°C up to 65°C

### CHEMICAL RESISTANCE •

• Seawater	Good
• Sewage Water	Good
• Butanol	Good
• Ethyl Acetate	Good
• Propanol	Good
• Toluene	Good
• Xylene	Good
• Citric Acid 5%	Good
• Citric Acid 20%	Good
• Acetic Acid 5%	Good
• Tartaric Acid 10%	Good
• Waste Food Stuff	Good
• Starch Solution 5%	Good
• Ammonia 0.88	Good

**COVERAGE** • Application rate will vary according to surface conditions, application technique and job conditions. Coverage rate of 2 m<sup>2</sup>/liter at 500 microns DFT is dominant.

**SURFACE PREPARATION** • All surfaces should be clean, dry and free from dust and other contaminants. Wet substrates should be sponge dried to remove all free surface water then air dried. Treat oil or grease contamination with degreaser followed by water or steam cleaning. The substrate must be fine textured since *FlexCrete 500* is applied in a thin coat.

**New concrete surfaces:** should be at least 28 days old and have a moisture content of less than 5%. The relative humidity at the surface should not be more than 25% as per BS8201:1981. Excessive laitance should be removed by mechanical methods. Dust and other debris should be removed by vacuum cleaning. Any fine cracks or pin holes should be covered with *MortCrete 3000* or other epoxy-based mortar.

**Old concrete surfaces:** damaged areas or surface irregularities should be repaired using *MortCrete 3000* or other epoxy-based mortar.

**Steel surfaces:** should be grit blasted to surface quality SA 2 ½ and primed with a single coat of

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**EpoPrime 100** or other epoxy primer. The lining work should be scheduled so that newly cleaned steel is coated as soon as possible before the formation of rust.

**Epoxy Screeds:** high spots or trowel marks should be rubbed down. Remove dust and debris by vacuum cleaning.

**MIXING** • The entire contents of the hardener container should be poured into the base container, taking care to scrape the hardener container clean. The two materials must be mixed thoroughly for at least 3 minutes and until a uniform color and consistency are obtained. Use a heavy duty slow speed power drill with a jiffy mixing blade. Care should be taken to scrape the sides and bottom of the container with the mixer. Do not add solvent thinners at any time.

**APPLICATION** • After mixing, **FlexCrete 500** should be immediately applied to the surface ensuring a continuous coating of uniform thickness is obtained. A stiff nylon brush or short nap roller is recommended for such application. For faster rates of application use an airless spray. The second coat can be applied as soon as the first coat has dried (4 – 6 hours) depending on the ambient and surface temperature. **FlexCrete 500** must be applied at a minimum total dry film thickness (DFT) of 500 microns.

For high build film thicknesses up to 2.0 mm, use a fiber mesh between coats. The fiber mesh should be applied to the first coat while still wet.

**CLEANING** • Tools and equipment must be cleaned with an organic solvent.

**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** • Non flammable material. 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** • 10 liter packs (includes hardener and base components).

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### Creative Concrete Concepts

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