



CHEM-SEAL 17

Two-Component, Solvented Epoxy Primer & Sealer

PRODUCT DESCRIPTION

Chem-Seal 17 is a two component low viscosity, solvented-epoxy clear sealer and primer for concrete substrate.

FIELDS OF APPLICATION

Chem-Seal 17 provides a tough, film forming sealer for concrete and provides protection against water entry and chemical attack. It also prevents concrete from dusting. **Chem-Seal 17** can be used as primer and sealer prior to the applications of **Chem-Crete CCC 7446** polyurethane coating, **Chem Crete-CCC 7666** Aliphatic Urethane Acrylic coating and other epoxy toppings and coatings.

PRODUCT FEATURES

- Low viscosity, penetrates deeply into the concrete.
- Bonds tenaciously, long pot life, & easy application.
- Economical epoxy sealer.
- Excellent dust proofing on concrete.

PACKAGING

Product	Packaging
Chem-Seal 17	2 and 10gal /pail 7 and 35 kg/pack

TECHNICAL DATA

	Part A	Part B
Solids	17 %	17 %
Color	Clear	Clear
Density Lb/gal (kg/L)	7.9 (0.95)	7.5 (0.90)
Shelf life	One year	One year

Properties	Value at 25°C	ASTM Method
Mix ratio by volume	1:2 (A:B)	-
Viscosity	25 cps	Brookfield
Mixed density	0.925 kg/lit	D-1475
Pot life (90 ml) @ 77°F (25°C)	45 minutes	-
Tack-free @ 77°F (25°C)	6-7 hours	-
Shore hardness @77°F (25°C)	80-D	D-2240
Tensile strength Psi (MPa) 7 days	5150 (35)	D-638

Flexural strength Psi (MPa) 7 days	2570 (17.5)	D-790
Compressive strength Psi (MPa) 7 days	8230 (56)	D-695
Bond strength Psi (MPa) 7 days	540 (3.7)	C-321
Elongation	15%	D-638
Water absorption	0.25% (24 hr.)	D-570

APPLICATION DATA

Limitations:

Application at ambient temperature below 5°C is not recommended. Exposure to temperatures exceeding 65°C for prolonged periods is not recommended.

Sufficient compressive and tensile strengths to withstand dynamic loading is required.

Surface Preparations:

New Concrete Surface:

New concrete or cementitious substrates should be at least 28 days old and moisture content of the substrate should be less than 5%. Concrete to receive high performance overlay systems should be designed, mixed and placed in accordance with internationally accepted practice.

All laitance and loose materials must be removed from the concrete surfaces. If the concrete is good, crack-free and sound with light laitance, surface preparation may be achieved by acid etching followed by thorough water washing using high pressure water jetting ensuring all traces of acid are removed.

Cracked or damaged concrete or heavy laitance should be removed and prepared by grit blasting, scrubbing or mechanical grinding until a solid surface is reached showing exposed aggregate.

On Existing Concrete Surfaces:

Remove all surface laitance, loose particles, dust and all contaminations in order to expose a clean and sound substrate. Mechanical means of preparations are preferred followed by industrial vacuum cleaning.

Areas of deeply penetrating contaminations of oils, greases and fats should be flame cleaned by hot compressed air or thoroughly washed by good industrial detergent **Chem-Crete CCC 060**.

The cleanly washed substrate is then allowed to dry completely.

Uneven concrete surfaces should be levelled to produce a smooth flat surface using an appropriate epoxy repair mortar technique.

Expansion, control and isolation joints in concrete substrates should be carried out through epoxy system and filled with an appropriate sealant.

Mixing Procedure:

Stir each component separately. Mix one part from part A and one part from part B by volume in a clean mixing container. Mix the epoxy with a slow speed drill with a mixing paddle attachment. Carefully scrape the sides and bottom of the pail during mixing. Blend for 3 minutes. Mix only the amount that can be used within the pot life.

Prior to application, the product should be stored under cover in dry conditions and protected from extremes of temperature, which may cause inconsistent workability, finish and cure times of the mixed material. Ideally, at least 24 hours before mixing, the product should be maintained at approximately 70°F (20 °C) temperature.

Please note: Large batches of epoxy will cure much faster than small batches. Mixed epoxy will cure much faster in hot weather than in cold weather.

Application:

Apply the prepared mixture to the pre-treated concrete by spray, brush or roller, at an approximate coverage of 200 to 300 ft²/gal (5 to 7 m² per liter).

The above coverage depending on the substrate porosity and application temperature. Ensure complete priming of all the substrate with **Chem-Seal 17**.

Top Coating:

Subsequent coatings such as **Chem-Crete CCC 7446** polyurethane coating or epoxy coatings must be applied within 8 hours of application of **Chem-Seal 17**. If the top coatings cannot be applied within 8 hours, reprime the surfaces.

Concrete Sealer/Dust proofer:

Application of **Chem-Seal 17** as concrete sealer and dust proofer, apply a second coat of **Chem-Seal 17** on the first coat at an average coverage of 300 ft²/gal (7.35 m² per liter).

Curing:

Allow the sealer to cure for a period of at least 24 hours for light pedestrian traffic and 7 days for full traffic.

CLEANING

Remove un-cured **CHEM-SEAL 17** from tools and equipment with a suitable solvent such as blended solvents, xylene or toluene immediately after use.

STORAGE

Every precaution should be taken to prevent fire. Drums and cans of coatings and solvents should be stored in cool (77°F or 24°C) area safe from fire exposure. When specified on container, protect material from freezing. Open containers, the liquid coating, its fumes & vapors must be kept away from any source of ignition, heat sparks, arcing, switches, open flames, including pilot lights, cutting torches & all tools that could cause spark. Do not smoke. Use explosion proof equipment. Foam or dry powder fire extinguishers should be placed where they can be quickly & safely reached in case of fire.

CLEANING

Chem-Seal 17 contains flammable aromatic solvents. Excessive contact with bare skin should be avoided. It is a good practice to wear gloves and to guard against splashes of **Chem-Seal 17**. Inhalation of fumes or vapour should be avoided.

Use a NSH/MSHA approved respirator. Thinning of material is not required under normal application conditions. However, if required thin material with maximum 10% Xylene. Blended Solvents or Xylene should be used for cleaning equipment, tools, etc.

TECHNICAL ASSISTANCE

Please contact International Chem-Crete Corporation for Technical Personnel.

WARRANTY

LIMITED WARRANTY: International Chem-Crete Inc. warrants that, at the time and place we make shipment, our materials will be of good quality and will conform to our published specifications in force on the date of acceptance of the order.

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shall determine the suitability of the product for specific application and assume all responsibility in connection

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