



TECHNICAL DATA SHEET – CT 3000

Revised: 05/2018

PRODUCT DESCRIPTION

A 100% solids, two component, high performance, trowelable, ceramic filled epoxy for rebuilding worn or damaged equipment to their original performance specifications or better.

FEATURES

- Excellent resistance to corrosion, cavitation, chemicals and erosion.
- Vertical or overhead repairs are easily done due to non-sag properties.
- Low chloride content reduces the possibility of corrosion attack and stress cracking on alloys.

RECOMMENDED USES

- Rebuild worn pump casings, suction plates, butterfly and gate valves.
- Repair tube sheets, heat exchangers, water boxes, and other circulating water equipment.
- Restore worn, eroded equipment to extend operating life.
- Repair other linings damaged by abrasion or cavitation.

CHEMICAL RESISTANCE

Sodium Hypochlorite 5%	E	Sodium Hydroxide 50%	E
Trisodium Phosphate 5%	E	Aluminum Sulfate 5%	E
Sulfuric Acid 10%	E	Ferric Chloride	E
Sulfuric Acid 50%	E	Acetic Acid 10%	U
Hydrochloric Acid 10%	E	Water	VG
Nitric Acid 10%	VG	Saturated salt solution	VG
Nitric Acid 40%	U	Leaded Gasoline	VG
Phosphoric Acid 10%	E	Mineral Spirits	VG
Phosphoric Acid 40%	VG	ASTM #3 oil	VG
Sodium Hydroxide 10%	E	Propylene Glycol	VG

E = Excellent VG = Very Good U = Unsatisfactory 7 day room temperature cure, 30 day immersion @ 75°F.

TYPICAL PROPERTIES

SOLIDS BY VOLUME	100%
VOLATILE ORGANIC COMPOUNDS	0.0 lb/gal (0 g/l)
THEORETICAL COVERAGE	1604 ft ² / gal @ 1 mil
RECOMMEND DFT	¼ - 5/8'
NUMBER OF COATS	1 or more
MIX RATIO (BY VOLUME)	2.9 "A" : 1"B"
MIXED CONSISTENCY	Putty
SHELF LIFE @ 60-90°F (16-32°C)	Part A months
	Part B months
TEMPERATURE RESISTANCE	350°F (dry)
COLOR	Dark blue

SPECIFICATION DATA

COMPRESSIVE STRENGTH - ASTM D 695	12700 psi
ADHESIVE TENSILE SHEAR - ASTM D 1002	2000 psi
CURED HARDNESS - ASTM D 2240	90 Shore D
DIELECTRIC STRENGTH - ASTM D 149	370 volts/mil

CT 3000

TROWABLE CERAMIC COAT



ORDERING INFORMATION

Table with 2 columns: Packaging (0.7 gallon, 2.28 gallon) and Shipping Weight (10 lbs (0.7), 32.5 lbs (2.28))

SURFACE PREPARATION

Remove all oil, grease or other contaminants from the surface to be coated in accordance with SSPC-SP 1.

- Non-Immersion: Abrasive blast to a Commercial Blast in accordance with SSPC-SP 6 and obtain a 2-4 mil (50-100 μ) angular anchor pattern.
• Immersion: Abrasive blast to a White Metal Blast in accordance with SSPC-SP 5 and obtain a 2-4 mil (50-100 μ) angular anchor pattern.
• Note: For equipment that has been handling sea water or other salt solutions a test for chloride contamination should be performed prior to application.

MIXING

Material is formulated to be a stiff mixture that will not sag when applied on vertical, curved or overhead surfaces. Place the resin (blue) and hardener (white) on a flat, disposable surface. Using a trowel or wide bladed tool mix thoroughly until the color is uniform and streak free, about 4 minutes.

It is strongly recommended that mixing be limited to full kits only. If mixing less than full kits mix by volume as follows: 2.9 parts Resin (A) to 1 part Hardener(B).

THINNING: DO NOT THIN

POT LIFE

Table with 2 columns: Material Temperature (75°F (24°C)) and Time (45 minutes)

APPLICATION CONDITIONS

Table with 4 columns: Normal, Minimum, Maximum for Material, Surface, Ambient, Humidity

Surface temperature must be 5°F (3°C) above the dew point.

APPLICATION

For maximum adhesion surfaces should be primed with CC 4000 to wet out the prepared substrate. After the initial coat the CT 3000 can be applied by trowel or wide blade putty knife, in multiple coats to achieve a 5/8" thickness in order to rebuild the original equipment or to achieve target thickness. Use MEK or similar solvent for cleanup.

CURE TIME

These times are based on a 30-50% RH. Excessive film thickness, cooler temperatures or inadequate ventilation will require longer cure times and could result in premature failure.

SURFACE TEMPERATURE

Table with 2 columns: Working Time (45 minutes), Tack Free (3 hours), Recoat (Min) (3 hours), Recoat (Max) (18 hours), Functional Cure (18 hours), Full Cure (33 hours), Chemical Exposure (6 days)

- If the material has exceeded its maximum recoat time or full cure time contact ITW Polymers Sealants North America, Inc. for recommended recoating procedures.
• Curing can be accelerated by using heat after the coating has been allowed to harden under ambient conditions. At 150°F material will cure in 4 hours.
• Holiday testing per NACE RP0199-98 should be conducted for all coatings going into immersion service. Use a setting of 100 volts/mil.

SAFETY INFORMATION

- Read the Safety Data Sheet (SDS) and container labels for detailed health and safety information.
• Do not apply material in enclosed areas without adequate air exchange and ventilation.
• All application personnel must use respirators rated for organic vapors, or in confined spaces wear fresh air respirators or fresh air hoods.
• Wear protective clothing, gloves and eye protection.
• Breathing fumes or contact with the skin may cause severe allergic reactions.

This product is intended for industrial use by properly trained professional applicators only.

STORAGE CONDITIONS

Coatings need to be protected from moisture contamination. Store drums and pails in a dry location at 50-90°F (10-32°C). Materials must be kept above 50°F (10°C).

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