ARCOR
EPOXY TECHNOLOGIES

Product Data Sheet

REVISED 4/2025

ARCOR® 8505

GENERIC TYPE: AMINE CURED 100% SOLIDS EPOXY REBUILDING COMPOUND

DESCRIPTION AND RECOMMENDED USES: ARCOR™ 8505 is a solvent free,(100% solids, 0% VOC), blend of ceramics and toughening agents which provides excellent wear, and enhanced adhesion, without the need for a primer. **ARCOR**™ 8505 is designed to be applied in one thick coat, up to 1.0+"(25+mm) vertical. It is an ideal material to protect areas of fluid flow equipment that are subjected to high wear. Good all-around chemical resistance. Insulates against Bi-Metallic Corrosion. Excellent impact resistance. Excellent resistance to cavitation.
Like our 2211 & EE-95 in application, look and feel, but with lower temperature limits and chemical resistances.

FOR INDUSTRIAL USE ONLY
SPECIFICATION DATA

TEMPERATURE: Immersion service;
Continuous 140F (60C); Spike to 200F(93C)
Dry to 250ºF(121C); Spike to 325F(163C)

CHEMICAL RESISTANCE:

Water:	Excellent
Alkalis:	Excellent
Inorganic Acids:	Good
Organic Acids:	Fair
Organic Solvents:	Good

ABRASION: Excellent

FLEXIBILITY: Good

FLEXURAL STRENGTH: 13,800 psi
(ASTM D790/7 days)
COMPRESSIVE STRENGTH: 17,900 psi
(ASTM D695/7 days)
TENSILE SHEAR: 3,560 psi
(ASTM D1002/steel: steel)

APPLICATIONS: Condensers, Heat exchangers, Divider plates, Manways, Pumps, Impellers, Propellers, Valves, Hydro-Wheels, Pipe Elbows..

SOLIDS BY VOLUME: 100%

VISCOSITY: Paste

POT LIFE: 20 Min/KG @ 72ºF (22C)

MIX RATIO: 2:1 by volume (Base: Activator) 100 gm: 50 gm by weight

COLOR: Blue

SHELF LIFE: 5 years at 55-95ºF, 13-35ºC

COVERAGE: Varies with thickness applied

DENSITY: 1.77 g/cm3

WEIGHT PER GALLON: 14.8 lbs (6.7 KG)

ORDER INFORMATION: To place orders and/or obtain pricing information contact:

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Application Sheet
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SEE MATERIAL SAFETY DATA SHEET (SDS) BEFORE HANDLING THIS PRODUCT;
download @ www.ArcorEpoxy.com; *ChemTel ERS / MOD Tel US: 800-255-3924; Outside US: +001-813-248-0585*

SURFACE PREPARATION:
Steel surfaces are to be abrasive blasted with chloride free abrasive. Exterior applications to SSPC SP-10 Near White metal finish. Immersion applications to SSPC SP-5 White metal 3 to 5 mil profile. Grind flat all burrs, weld seams, radius sharp edges. Fresh blasted ferrous surfaces to be primed immediately to prevent oxidation of surface. Prime as needed..

Concrete surfaces should be degreased if oil and grease contamination is present. Degreased surface shall be high pressure washed, acid etched, and high pressure washed again so surface is clean and free of all grease, oils and surface laitance. Existing coatings should be abrasive blasted to clean concrete. Prime as needed.

MIXING:
Thoroughly mix Activator into Base with mixing stick or drill with low speed mixing blade. Mix by Volume 2 parts Base to 1 part Activator. Or by weight 100 grams base to 43 grams activator.

THINNING: Never thin.

APPLICATION:
Use heavy plastic squeegee or putty knife. Work material into profile of substrate to achieve maximum adhesion and to remove any entrapped air. Contour to correct form with plastic applicator or putty knife. If mold or form is used, coat its surface with a release agent to prevent adhesion of the material. Machining is possible using carbide tipped tools. Machining & Grinding is best done within 8 hours of application at 77ºF, 25ºC (add 1-1/2 hour for each 10ºF below 77º, subtract 1 hour for each 10º above 77ºF). Machining & Grinding can be done after this time, but the material does become very hard and will rapidly wear bits and discs. Large holes and cracks can be bridged with glass or metal cloth.

APPLICATION TEMPERATURE:
Material: Keep between 55 to 95ºF (17 to 35ºC). Substrate: keep between 45 to 105ºF (7 to 40ºC). the difference in temperature of the substrate and the material should never exceed 10ºF, 5ºC. Substrate shall be a minimum of 5ºF (3ºC) above dew point. Do not apply if relative humidity exceeds 90%. If necessary heat the metal prior to surface preparation using electric heater or heat lamp. Never use gas, oil or kerosene heaters as they will leave a greasy residue on metal surface. For best results keep all material in warm area overnight (75ºF+) for ease of mixing. If necessary Base component of material can be heated by microwave for 30 seconds for a 1 KG Base unit or by warm water bath. Heat activator by warm water bath only. If necessary let material cool before application. Application onto surfaces above 77F (25C) may cause the material to sag/slump. This will increase as temperatures increase, so single coat thickness must be reduced.

OVERCOAT/CURE TIME:
Recoat while material is still soft (fingernail indent), between 2 to 8 hours at 77ºF, 25ºC. If overcoat window is exceeded abrade surface with course sandpaper, grinder or brush blast. Full cure before immersion 72 hours at 77ºF (25C). Add 1-day additional cure time for every 10ºF below 77ºF. Subtract 15 hours of cure time for each 10ºF above 77ºF. Force cure with heat for best performance for 1 hour at 200ºF (93ºC), 12 hours at 120ºF (49ºC).

CLEAN UP: Clean tools immediately after use with M.E.K., Acetone or similar. 98+% Isopropyl Alcohol can be used in solvent restricted areas.

WARNING: Base contains epoxy resin. Activator contains alkaline amines, a strong sensitizer. May cause skin irritation, sensitization or other allergic responses. Use with good ventilation, particularly if heated or sprayed. Prevent all contact with skin or eyes. Wear protective clothing, goggles, gloves or barrier creams. Keep containers closed when not in use. Wash thoroughly after handling. In case of skin contact immediately wash with soap and water. In case of eye contact, flush with water for 15 minutes. If irritation persists seek medical attention. Consult the Product Safety Data Sheets (SDS) BEFORE USE!

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