ARCOR
EPOXY TECHNOLOGIES

Product Data Sheet
ARCOR® 8509 RC

Revised 12/2023

GENERIC TYPE: AMINE CURED 100% SOLIDS EPOXY QUICK-SET REBUILDING COMPOUND

DESCRIPTION AND RECOMMENDED USES: ARCOR® 8509 RC is a solvent free fast cure rebuilding epoxy for high abrasion & impact areas. 8509 RC sets in 20 minutes and can get put in service within 2 hours, making it an ideal rapid repair material to minimize shutdown duration. 8509 RC is filled with high density surface modified large sized hi-crush strength ceramic beads and DuPont Kevlar fiber giving excellent abrasion and impact resistance. 8509 RC has excellent resistance in a wide variety of chemical environments and has dry heat resistance to 450ºF. 8509 RC has an easy to use 2:1 mix ratio by Volume or Weight and can be applied overhead or vertically at 1"+(25mm+).

FOR INDUSTRIAL USE ONLY

SPECIFICATION DATA

TEMPERATURE: Immersion service Max. 140ºF (60ºC); Spike to 180F(82C); Dry to 350ºF (177ºC).

CHEMICAL RESISTANCE:

Water (Fresh, Salt, Brackish):	Excellent
Alkalis:	Very Good
Inorganic Acids:	Fair
Organic Acids:	Fair
Organic Solvents:	Fair

ABRASION: Excellent

FLEXIBILITY: Fair

BOND STRENGTH: 1,200 psi @ 1/2 hours; 2,200 psi @ 1 hours; 3,200 psi @ 24 hr.

HARDNESS, SHORE D: 25 @ 10 min.; 60 @ 20 min.; 82 @ 2hr.; 97 @ 24 hr.

FILM THICKNESS: up to 1000 mils/coat

APPLICATIONS: Coal Handling Equipment (Chutes, Crushers, Baghouse Repair; Duct Repair; Tanks, Pumps and the like which contain liquids or gases. Use for bonding Dissimilar Metals. Use for Steel, Concrete, Misc. Metals, Glass, Wood.

SOLIDS BY VOLUME: 100%

VISCOSITY: Putty

POT LIFE: 20 MIN / KG @ 72ºF

DENSITY: 1.98 g/cm^3

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

WEIGHT PER GALLON: 16.6 lbs (7.52 KG.)

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

ARCOR by Novolac Epoxy Technologies Inc.
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Sales@ArcorEpoxy.com

Manufacturer makes no warranty either expressed or implied including warranties of merchantability or fitness for a particular purpose for this product. Under no circum- stances will the manufacturer be liable for incidental, consequential or other damages, breach of warranty, strict liability, or any other theory arising out of use of this product.

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REVISED 12/2017

REVIEW the SAFETY DATA SHEET BEFORE HANDLING THIS PRODUCT

SURFACE PREPARATION: Metal surfaces are to be cleaned and degreased then abrasive blasted with chloride free abrasive. Exterior applications to SSPC SP-10 Near white finish minimum 3 mil profile. Immersion applications to SSPC SP-5 White metal, 3 to 5 mil profile. Grind flat all burrs, weld seams, radius sharp edges. Fresh blasted surfaces to be rebuilt as quickly as possible to prevent oxidation of the surface and allow time for proper rebuilding of the dam- aged area. **Minimum for Rapid Repair;** clean area to be repaired to remove loose dirt, scale and oils. Use Acetone, MEK or a similar solvent and a degreaser if oils are present and/or moisture. If possible sand or grind the area with course paper or disk. (16-24 Grit) or ridged wire wheel attachment.

MIXING:
Thoroughly mix Activator into Base with mixing stick scraping sides and bottom of container or mixing board. Mix by Volume 2 parts Base to 1-part Activator. Or by weight 100 grams Base to 50 grams Activator. Mix thoroughly to produce an even colored, streak-free material.

THINNING: If necessary to increase pot life (mixing large amount, working in hot ambient temperatures (+85F), thin with MEK or Acetone at a maximum of 5% by volume (8oz per gallon, 12oz per 5L). Mix the Acetone fully into the Base component. Then add the Activator and mix. This will increase working life and slow cure time. Also, will reduce vertical/overhead hang.

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 putty knife or plastic applicator. If mold or form is used, coat the surface with a release agent to prevent adhesion of the material. Machining is possible using diamond tipped tools only. Sanding Grinding is possible if done within 1 hour of application at 77ºF, 25ºC. Caution: Material cures rapidly. Use only the quantity of material which can be easily applied within 10 to 20 minutes. Spreading mixed material on a mixing board or other flat surface will extend the working life. 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 80% without an Acetone wipe of the surface to be coated, immediately before coating. 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 20-30 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. Caution: Material cures rapidly. Use only the quantity of material which can be easily applied within 10 to 20 minutes. Heating will accelerate cure time.

OVERCOAT / CURE TIME:
Recoat as soon as possible while material is still soft, within 1 hour at 77ºF, 25ºC. If overcoat window is exceeded abrade surface with course sandpaper, grinder or brush blast and Acetone wipe. Full cure before immersion 2 hours at 77ºF. Add 15 minutes additional cure time for each 10ºF below 77ºF. Subtract 15 minutes of cure time for each 10ºF above 77ºF.

CLEAN UP: Clean tools immediately after use with M.E.K., Acetone or similar. In solvent controlled areas use 98+% Isopropyl Alcohol.

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