

## Product Technical Data Sheet

### ARCOR™ S-16.5

REVISED 3/2019.1

**GENERIC TYPE:** AMINE CURED 100% SOLIDS NOVOLAC, TOPCOAT

**DESCRIPTION AND RECOMMENDED USES:** ARCOR® S-16.5 is a solvent free, high functionality epoxy Novolac designed particularly as a protective coating for metals in highly aggressive environments especially high chemical, high abrasion and elevated temperature. Excellent in a wide array of caustics and acids. The ARCOR® S-16.5 multi-functional chemistry produces an excellent coating suited for aggressive service and is suitable for immersion in a wide array of chemicals. ARCOR® S-16.5 can be applied up to 40 mils without slump.

#### FOR INDUSTRIAL USE ONLY

#### SPECIFICATION DATA

**TEMPERATURE:** Immersion service  
Max. 250°F (177°C); Spike to 350°F (3 hrs.)  
Recommended force cure at 250°F @ 2 hrs.  
Dry to 400°F (190°C); Spike to 500°F (246°C)  
(3 hrs.)

Temperature resistance will vary depending on chemical exposure. Consult ARCOR.

#### **CHEMICAL RESISTANCE:**

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

**ABRASION:** Excellent

**FLEXIBILITY:** Very Good. Excellent with Polyester or Fiberglass Mat; 1.5 oz/ft<sup>2</sup> (.5 KG/M<sup>2</sup>)

**APPLICATIONS:** Neutralization Tanks, Caustic Tanks, Clarifiers, Demin Tanks, Chemical Drain Troughs, Secondary Containment, Pumps, FGD; Outlet Ducts, Absorbers, I.D. Fans, Scrubbers. Barge Tanks. Separators. Pumps. Low coefficient of Friction improves flow. Industrial Floorings. For the most aggressive applications we recommend Force Cure at 250°F (121.1°C) @ 2 hrs. Product can be force cured in service, consult ARCOR.

**SOLIDS BY VOLUME:** 100%

**VISCOSITY:** 65,000-85,000 cps

**POT LIFE:** 20 MIN/100gr @ 72°F (22.2°C)

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

**COLOR:** Blue, Light Gray, Gray

**SHELF LIFE:** 5 Years at 55-95°F (13-35°C)

**COVERAGE:** 1604/#mils = ft<sup>2</sup>/gal/coat;  
149/#mils = M<sup>2</sup>/Gal; 3,785/#microns = M<sup>2</sup>/Gal  
1mil = 25 micron; 1 Gal = 3.785 L; 10.77ft<sup>2</sup> = M<sup>2</sup>

**WEIGHT PER GALLON:** 12.6 lbs. (5.7 KG)  
3.3 lbs. (1.5 KG)/Liter

#### **FILM THICKNESS:**

**Spray Application;** 1-Coat 20 to 40 mils

**Hand Application;** 2-3 Coats 15-20 mils per coat

**Final DFT Specified by Need;** Consult ARCOR

**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](http://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 4+ mil profile. Grind flat all burrs, weld seams, radius sharp edges. Fresh blasted ferrous surfaces to be primed with S-20 immediately to prevent oxidation of surface.

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 with EE-10.

#### **MIXING:**

Thoroughly mix Activator into Base with mixing stick or drill with low speed mixing blade 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 and streak-free material.

**THINNING:** Never thin.

#### **APPLICATION:**

Brush: medium to stiff bristle of sufficient quality that bristles do not pull out and stick in coating. Trim or tape to <1" nap.

Roller: good quality 1/8" nap.

ARCOR Cartridge Sprayer: Heat to 140F(60C). Piston '3'; Tip Air '3'.

Plural Spray: .029-.035 RAC tip, 3,000-4,500 PSI, Heat to 160°F Base, 120°F Activator. Ambient Temperature and Humidity will affect temperature and pressure setting. Consult ARCOR.

Airless Spray: 029-.035 RAC tip, 4,500-5,500 PSI(60:1+). Recommended in-line heater at 120° to 135°F (Caution: Short Pot-Life).

Ambient Temperature and Humidity will affect temperature and pressure setting. Contact ARCOR.

All spray equipment should employ traps to prevent water and oil from contaminating coating and screens to prevent particulate contamination.

#### **APPLICATION TEMPERATURE:**

Material: Keep between 55 to 95°F (17 to 35°C). Substrate: Keep between 45 to 105°F (7 to 40°C). The difference in temperature of the substrate and the material should never exceed 10°F(5°C). Substrate shall be a minimum of 5°F(3°C) above dew point.

Do not apply if relative humidity exceeds 90%. If necessary, heat 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 (75°F+, 24°C) for ease of mixing. If necessary, base component of material can be heated by microwave for 30-45 seconds for a 1 KG Base unit. If necessary, let material cool before application to allow for more pot life during application.

#### **OVERCOAT / CURE TIME:**

By brush, roller or squeegee recoat while material is still soft, but tack-free, between 3-12 hours at 77°F(25°C). **IMPORTANT:** If overcoat window is exceeded abrade surface with course sandpaper, grinder or brush blast and wipe with MEK or Acetone. By spray application recoat between 2-12 hours at 77°F(25°C). Full cure before immersion recommended 72 hours at 77°F(25°C). Add 1 hour's additional cure time for each 10°F(-12.2°C) below 77°F(25°C). For highly aggressive environments Force Cure with heat for best performance for 8 hours at 150°F (66°C), 2 hours at 250°F (121°C).

**CLEAN UP:** Clean tools immediately with M.E.K., Acetone or similar. Isopropyl Alcohol (98+% ) 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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