ARCOR
EPOXY TECHNOLOGIES

PRODUCT DATA SHEET

Revision July 2024

ARCOR® S-20

GENERIC TYPE: AMINE CURED 100% SOLIDS EPOXY TOPCOAT

DESCRIPTION AND RECOMMENDED USES: **ARCOR®** S-20 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 high temperature. Excellent in a wide array of caustics and acids. The **ARCOR®** S-20 multi-functional chemistry produces an excellent coating suited for aggressive acid and caustic service, and is excellent at elevated temperatures. **ARCOR®** S-20 can be applied up to 40 mils by hand without slump, 60 mils by spray. Suitable for heavy wear and abrasion. Smooth, slick finish. Superior adhesion. Excellent flex allows for use in large tank floors without the need for fiberglass/composite inlay.

FOR INDUSTRIAL USE ONLY

SPECIFICATION DATA

TEMPERATURE: Immersion service
Max.300ºF (135ºC); Spike to 450ºF (218ºC) (3 Hrs)
Dry 400ºF (190ºC); Spike to 500ºF (246ºC) (3 Hrs)

CHEMICAL RESISTANCE:

Water:	Excellent
Alkalies:	Excellent
Inorganic Acids:	Excellent
Organic Acids:	Excellent
Organic Solvents:	Excellent

ABRASION: Excellent

FLEXIBILITY: Good. Very Good with Polyester or Fiberglass Mat; 1.5 oz/ft2 (.5 KG/M2)

FILM THICKNESS: Hand application 20-40 mils/ coat,(.5-1.0 mm/coat)

APPLICATIONS: Neutralization Tanks, Caustic Tanks, Clarifiers, Demin Tanks, Chemical Drain Troughs, Secondary Containment, Pumps. FGD; Outlet Ducts, Absorbers, I.D. Fans, Scrubbers, Baghouses, Coal Silos. Low coefficient of Friction improves flow.

SOLIDS BY VOLUME: 100%

VISCOSITY: 65,000-85,000 cps

POT LIFE: 20 MIN/Gal @ 72ºF

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

COLOR: Blue, Gray, Red

SHELF LIFE: 5 Years at 55-95ºF (13-35ºC)

COVERAGE: @ 20 mils: 80 sf/gal
(add up to 20% waste)

WEIGHT PER GALLON: 12.6 lbs (5.7 KG)

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

ARCOR® by Novolac Epoxy Technologies Inc.
28 Jonathan Bourne Drive
Pocasset, MA 02559

The manufacturer makes no warranty either expressed or implied including warranties of merchantability or fitness for a particular purpose for this product. Under no circumstances 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.

ARCOR
EPOXY TECHNOLOGIES

PRODUCT APPLICATION DATA
ARCOR® S-20

SEE MATERIAL SAFETY DATA SHEET BEFORE HANDLING THIS PRODUCT

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. Grind flat all burrs, weld seams, radius sharp edges. **ARCOR®** S-20 is self-priming. As needed, fresh blasted surfaces to be primed with **ARCOR®** S-30 Prime, EE-11 Prime or EE-80.

Concrete surfaces : Not Recommended for hand or roller application. 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. **ARCOR®** S-20 is self-priming. As needed, Prime with **ARCOR®** S-20, EE-10, EE-11 Prime, EE-79.

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 50 grams activator.

THINNING: Never thin.

APPLICATION:
Brush: medium to stiff bristle of sufficient quality that bristles do not pull out and stick in coating (epoxy glued bristles are best). Trim or tape to <1" nap.
Roller: use good quality 3/8" nap.
Cartridge Sprayer: Heat to 130-140F. Shake vigorously before inserting into sprayer. Heat by microwave or water bath.
Plural Spray: .029-.035 RAC tip, 2,500-3,500 PSI, Heat to 160ºF Base, 110ºF Activator.
Airless Spray: use .029-.035 RAC tip, 4,000-5,000 PSI (55:1+). Recommended only with in-line heater at 120º to 135ºF. (Caution: Short Pot-Life). *Consult ARCOR.*
Conventional Spray: Not Recommended
All spray equipment should employ traps to prevent water and oil from contaminating coating and 30 mesh screens prevent particulate contamination.

APPLICATION TEMPERATURE:
Material: Keep between 55 to 95ºF (13 to 35ºC). Substrate: Keep between 45 to 105ºF (7 to 40ºC). The difference in temperature of the substrate and the coating should never exceed 10ºF (5ºC). Substrate shall be a minimum of 5º(3ºC) 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 (75ºF+, 24ºC) for ease of mix- ing. If necessary base component of material can be heated by microwave for 30-45 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.

OVERCOAT / CURE TIME:
Overcoat windows are affected by temperature and humidity. The following are general guidelines.
By Brush or Roller recoat between 3 and 12 hours at 72ºF (25ºC).
When spraying recoat between 2 and 12 hours. Full cure before immersion 24 Hours at 72ºF. For highly aggressive environments Force Cure is recommended. Force Cure: 12 hours at 150ºF (66ºC), 4 hours at 250ºF (121ºC).

CLEAN UP: M.E.K., Acetone or another Ketone blend. For 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.