product data

carboline®

PLASITE® 5302 AR

Formerly Plasguard 5302AR

PRODUCT DESCRIPTION
PLASITE 5302AR is an epoxy monolithic liner formulated for excellent abrasion resistance while retaining chemical, temperature and other physical properties of PLASITE 5302.

USES
Not intended where aesthetics are a concern. Heavy duty lining designed for areas requiring the ultimate in abrasion resistance up to 150°F.

- Slurry Line Elbows
- Cobbler Repulp Water Circulators
- Feed Chutes
- Pan Feeders
- Classifier Flights and Shoes
- Pump Casings
- Conveyor Skirts
- Hoppers
- Chute Lining
- Pipe Elbows

PRODUCT ADVANTAGES
Cures quickly to form an exceptionally tough, abrasion resistant surface. Excellent adhesion to concrete and steel. Minimum down time. Non-shrinking.

COLOR: Gray

CHEMICAL RESISTANCE
Not affected by water, oil, brine, most acids and alkalines. For specific chemical resistance properties, refer to PLASITE Bulletin TD-5 (PLASITE 5302).

SYSTEM
The Plasite 5302 AR system consists of a **prime coat,** a **liner coat,** and a **gel coat**. All three coats use the same Part A and Part B. The liner coat uses the addition of a Part C (aggregate).

PACKAGING
Standard Unit (covers 132 ft^2)
16 Part A's – Resin (each 0.28 gal)
16 Part B's – Hardener (each 0.04 gal)
12 Part C's - Chemical Resistant Aggregate (used in liner coat only)
Bulk Units (Special Order)
Full Bulk units cover 1584 ft^2.
Half-bulks units cover 792 ft^2.

COVERAGE
PRIMER COAT: One Part A and one Part B is normally sufficient for priming a surface area of 66 ft^2.

LINER COAT: One Part A, one Part B, and one Part C covers 11 ft^2 at 1/8" thickness.

NOTE: IF SURFACE IS ROUGH, ADDITIONAL PRIMER AND LINER WILL BE REQUIRED.

***GEL COAT*:** One Part A and one Part B is normally sufficient for covering a surface area of 66 ft^2.

(Example: for a 1200 ft^2 project, one would need 9 standard units, or 144 Part A's, 144 Part B's and 108 Part C's.
Summary:18(A+B) are used for prime coat, 18 (A+B) for gel coat and 108 (A+B+C) used for liner coat.

STORAGE TEMPERATURE
PLASITE 5302AR should not be stored at temperatures below 25°F or higher than 85°F for long periods of time.

Storage life is 12 months at 70°F.

PHYSICAL CHARACTERISTICS

Compressive Strength.....13,000-15,000 psi (ASTM D-695)
Modulus of Elasticity.....1.312 x 10^6 (ASTM D-695)
Tensile Strength.....1500-2500psi (ASTM D-638)
Flexural Strength.....5,300-6,000 psi (ASTM D-790)
Thermal Coefficient of Linear Expansion.....9.16 x 10^{-6} in./in.°F (ASTM D-696)
Solids.....100%
Colors.....Gray

Prior to application, all three components and equipment must be stored at 70°F to 85°F for at least 48 hours.

SURFACE PREPARATION
New Concrete
New concrete must have a minimum of 28 days cure, and no curing agents or sealers shall be used unless approved by Carboline Company.

Remove oil, grease or other loose or foreign materials and contaminants.

A good bonding tooth, the texture of 40 to 60 grit sandpaper, is desired with the removal of all laitance. To provide the foregoing bonding tooth, it is necessary to prepare the surface using one of the following methods:

A. Sandblast with fine sand and reduced pressure
B. Scarify
C. Rotary shot blast, such as Blastrac®

Old Concrete
Remove all powdery, weak concrete, paint, wax, oil, grease or other contaminants.

Once the concrete has been cleaned and neutralized, one of the following methods shall be used to provide a good bonding tooth, a surface with the texture of 40 to 60 grit sandpaper, with the removal of all laitance.

A. Sandblast with fine sand and reduced pressure
B. Scarify
C. Rotary shot blast, such as Blastrac®

NOTE: DEGREE OF CONTAMINATION AND INTENDED SERVICE WILL DETERMINE DEGREE OF SURFACE PREPARATION. ALL SURFACES MUST BE DRY BEFORE APPLICATION.

Metal Surfaces
Clean by solvent degreasing, followed by abrasive blasting to near white SSPC-SP10 or NACE No. 2 with a 4 mil minimum anchor pattern or "tooth".

APPLICATION TEMPERATURE
Do not apply when surface temperature is below 40°F.

IMPORTANT! FOR APPLICATION, THE MATERIAL MUST BE 70°F TO 85°F.

PLASITE®5302 AR

MIXING
PRIMER COAT: Mix Parts A & B thoroughly (the pot life or working life is approximately 20 minutes in the can).

LINER COAT: Empty the contents of Part B into Part A and mix thoroughly. Then empty the mixture into a mixer, draining the can for about 1/2 minute. Start mixer and slowly add Part C and mix approximately 5 minutes.

GEL COAT: Mix Parts A & B thoroughly (the pot life or working life is approximately 20 minutes in the can).
NOTE: PERSON MIXING SHOULD WEAR A DUST MASK OR RESPIRATOR.

Mixer
A mechanical mixer designed for quick, thorough mixing of aggregated epoxy coatings similar to those manufactured by:

KOL MIXAL Div. of Man U Fab, Inc.
7740 Main Street N.E.
Minneapolis , MN 55432
(612) 574-1768

QUICK STIR, INC.
P.O. Box 327
Port Clinton, OH 43452
(419) 732-2611

IMPORTANT! THE POT LIFE OR WORKING LIFE OF THE LINER BLEND IS 30 MINUTES. ALWAYS POUR MIXED BATCHES AS SOON AS BLENDED.

IMPORTANT! MIXED MATERIALS REMAINING IN CONTAINER WILL PRODUCE HEAT AND MAY SMOKE. KEEP AWAY FROM COMBUSTIBLE MATERIALS. DO NOT RESEAL CONTAINERS!

APPLICATION
CAUTION!! Application in direct sunlight and rising surface temperature may result in blistering of the materials due to expansion of entrapped air or moisture in the concrete.

Concrete surfaces that have been in direct sunlight must be shaded for 24 hours prior to application and remain shaded until the initial set has taken place. When the surface temperatures are rising, it may be necessary to postpone the application or apply during the cooler evening hours.

PRIMER: Apply a thin coat of primer by brush or roller. Spread the liner immediately before primer has hardened, which will occur in approximately 1 to 1 1/2 hours at 70°F.

NOTE: IF PRIMER HARDENS BEFORE LINER IS APPLIED, IT MUST BE WHIP BLASTED, REMOVING ALL GLOSS BEFORE TOPCOATING.

LINER: Spread liner evenly over surface. Build up low spots to desired thickness. Finish each batch as you go.

A 3-1/2" x 10" trowel with rounded corners (referred to as a swimming pool trowel) is recommended for liner application.

GEL COAT: A gel coat is recommended to provide maximum chemical resistance. The gel coat may be applied by brush or roller once the liner has hardened enough to allow application without damaging the liner. Make sure all pores or trowel pulls are completely sealed, keeping as thin a film as possible.

Edges
If it is necessary to stop when applying PLASITE 5302AR liner, do not feather the liner out but, using the edge of your trowel, cut a sharp (90°) edge. When work is resumed, simply prime edge as you prime substrate.

Cure Time
Hardening Time: 8 hours at 70°F

Curing Time: 72 hours at 70°F

Temperature schedule listed below may be used as a guide when rapid curing is necessary:

Temperature	Curing Time
130˚F	8 Hrs
150˚F	6 Hrs
170˚F	4 Hrs

CLEAN UP
Cured or hardened PLASITE 5302AR is almost impossible to remove. Clean tools and equipment immediately with hot, soapy water or PLASITE Thinner #71.

SAFETY
READ THIS NOTICE
SAFETY AND MISCELLANEOUS EQUIPMENT

It is recommended that the operator provide himself with clean coveralls and rubber soled shoes and observe good personal hygiene. Certain personnel may be sensitive to various types of resins which may cause dermatitis.

When working in confined areas adequate ventilation must be provided. Respirators or fresh air supplied hoods may be required.

FIRE AND EXPLOSION HAZARDS: PRODUCT CONTAINS LESS THAN 1% VOLATILE COMPONENTS. HOWEVER, VAPORS ARE HEAVIER THAN AIR AND COULD TRAVEL LONG DISTANCES, IGNITE, AND FLASHBACK. ELIMINATE ALL IGNITION SOURCES. Keep away from heat, sparks and open flame and use necessary safety equipment such as air mask, explosion-proof electrical equipment, non-sparking tools and ladders, etc. Avoid contact with skin and breathing of vapor or spray mist. When working in tanks, rooms and other enclosed spaces, adequate ventilation must be provided. Refer to PLASITE Bulletin PA-3. Keep out of the reach of children.

CAUTION - Read and follow all caution statements on this product data sheet, material safety data sheet and container label for this product.

This bulletin provides standard information on the coating and application procedure. Since varying conditions may not be covered, consult your local sales representative or Carboline's Technical Service Department for further information.

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An RPM Company

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