product data

carboline®

PLASITE® 5308

Formerly PLASGUARD 5308

TYPE
PLASITE 5308 is a monolithic liner formulated for chemical and abrasion resistance in continuous immersion service with direct food contact.

INTENDED USE
Heavy duty lining for:

Process Water Tanks
Chutes
Food Storage Tanks

ADVANTAGES
Cures quickly to form an exceptionally tough, impact and abrasion resistant surface. Excellent adhesion to concrete, steel and wood. Minimum down time. Non-shrinking. PLASITE 5308 meets the FDA requirements for 21CFR, 175.300. Meets requirements of the U.S. Department of Agriculture for use as a liner for direct food contact vessels.

COLOR: Gray

SURFACE PREPARATION
All surfaces must be clean, dry and free of contamination prior to application.

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

A good bonding tooth, a texture of 40 to 60 grit sandpaper, is desired with the removal of all glaze. To provide the foregoing bonding tooth, it is necessary to prepare the surface using one of the following methods: sandblast with fine sand and reduced pressure, scarify or 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 a texture of 40 to 60 grit sandpaper, with the removal of all glaze: sandblast with fine sand and reduced pressure, scarify or rotary shot blast such as Blastrac®.

Metal Surfaces
Degrease surface prior to sandblasting. Use organic solvents, alkaline solutions, steam, hot water with detergents or other systems that will completely remove dirt, oil, grease, etc.

Blast the surface to near white SSPC-SP10 or NACE No. 2 using a Venturi blast nozzle with 100 psi air. To produce the 4 mil minimum anchor pattern or "tooth," the blasting media used shall be a properly graded, clean, sharp angular abrasive similar to Humble Abrasive Flint S7 (6-30 mesh), Steel Grit (HG25) or BLACK BEAUTY® (BB1040). For application, the material must be 70 to 85°F.

APPLICATION TEMPERATURE
Do not apply when surface temperature is below 60°F. Material must be 70 to 85°F for application.

PHYSICAL SPECIFICATIONS

Compressive Strength: ……ASTM D695, 13,000 - 15,000 psi

Modulus of Elasticity:……ASTM D695, 1.312 x 10^6

Tensile Strength:……ASTM D638, 1500 - 2500 psi

Flexural Strength:……ASTM D790, 5300 - 6000 psi

Thermal Coefficient of Linear Expansion:
……ASTM D696, 9.16 x 10^{-6} in/in°F

Solids:……100%

CHEMICAL RESISTANCE

Not affected by water, oil, brine, most acids and alkalines.

PACKAGING
A unit of 5308 consists of primer, liner and gel coat.

A unit of PLASITE 5308 consist of:

7 cartons of primer liquids
A carton contains:
(2) can Part A
(2) can Part B

12 cartons of Part C chemical resistant aggregate

1 carton of Gel Coat liquids
A carton contains:
(2) can Part A
(2) can Part B

Note: The resins (Part A) and the hardeners (Part B) for the primer, and liner are identical (both generically and in quantity) and are used interchangeably. The gel coat resin (Part A) and the hardner (Part B) are different and are labeled to indicate this.

COVERAGE
Coverage based on a normal surface.

A standard unit of 5308 will cover 132 ft^2 at 1/8" thick.

Primer
One Part A and one Part B is sufficient for priming a surface area of 60 to 80 ft^2.

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

Gel Coat
One Part A one Part B covers a surface area of 66 ft^2

MIXING
Primer
Mix Part A & B thoroughly (the pot life or working life is approximately 20 minutes in the can).

PLASITE®5308

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.
Minneapolis, MN

KENRICH PRODUCTS
Portland, OR

Important! The pot life or working life of the liner blend is 30 minutes. Always pour mixed batches as soon as blended. Mixed materials remaining in container will produce heat and may smoke.

KEEP AWAY FROM COMBUSTIBLE MATERIALS. DO NOT RESEAL CONTAINERS!

Liner
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.

Note: Person mixing should wear a dust mask or respirator.

Gel Coat
Mix Parts A & B thoroughly (the pot life or working life is approximately 20 minutes in the can).

APPLICATION
Application in direct sunlight and rising surface temperatures 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 by brush or roller. Apply as thin a film as possible to wet the surface. Excessive primer application may cause liner to sag. 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 5308 liner, do not feather the liner out. Use the edge of your trowel to cut a sharp (90°) edge. When work is resumed, simply prime edge as you prime substrate.

STORAGE TEMPERTURE
PLASITE 5308 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.

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

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	Cure Time
130°F	8 hours
150°F	6 hours
170°F	4 hours

CLEAN UP
Cured or hardened PLASITE 5308 is almost impossible to remove. Clean tools and equipment immediately with hot, soapy water or Plasite Thinner #71.

INSPECTION
A pinhole-free film is essential for immersion service. Testing with a Tinker & Rasor Model AP-W, Stearns Model 14/20 or equivalent is required. 10,000 to 14,000 volts should be used. Allow a minimum of 48 hours at 70°F before holiday testing.

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

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.

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 tool 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 and respirators or fresh air supplied hoods may be required. 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.

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