product data



Plasite 5306

Polyamine Cured Epoxy Lining

TYPE

PLASITE 5306 is an ambient cured monolithic liner formulated for optimum chemical and abrasion resistance in extremely corrosive atmospheres or continuous immersion service.

INTENDED USE

Not intended where aesthetics are a concern. Heavy-duty lining for:

Trough Walls Ventilating Systems Foundations Fourdrinier Pits Conveyor Troughs Cyclones Sand Hoppers **Conveying Tunnels** Pumps Clarifiers Metal Pans Chutes Tanks **Trenches**

Acid Pits

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.

COLOR: 5306 comes in a non-pigmented formula only. Resin appears clear to an amber-green color. Aggregate coloration will show through.

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).

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®.

Note: Degree of contamination and intended service will determine degree of surface preparation. All surfaces must be dry before application.

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/0.1 mm 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).

PHYSICAL SPECIFICATIONS

Compressive Strength......3,000 - 15,000 psi (ASTM D659)

Modulus of Elasticity......1.312 x 10⁶ (ASTM D695)

Tensile Strength..... 1500 - 2500 psi (ASTM D638)

Flexural Strength......5300 - 6000 psi (ASTM DC90)

Thermal Coefficient of Linear Expansion

......9.16 x 10⁻⁶ in/in/°F(ASTM D696)

Solids......100%

CHEMICAL RESISTANCE

Not affected by water, oil, brine, most acids and alkalies. For specific chemical resistance properties, refer to PLASITE Bulletin TD-5.

APPLICATION TEMPERATURE

Do not apply when surface temperature is below 40°F/4°C For application, the material must be 70-85°F/21°-29°C.

PLASITE 5306 is offered in the following options (primer and gel kits included):

A standard unit consists of:

8 cartons of liquids

A carton consists of:

(2) cans of Part A

(2) cans of Part B

12 bags of PLASITE 5300 Series Aggregate

A 1/2 bulk unit consist of:

(1) 55 gallon drum of Part A

(1) 55 gallon drum of Part B

114 bags of PLASITE 5300 Series Aggregate

15 cartons of measuring tool

A 3/4 bulk unit consist of:

(1) 55 gallon drum of Part A

(1) 55 gallon drum of Part B

171 bags of PLASITE 5300 Series Aggregate

15 cartons of measuring tool

A bulk unit consist of:

(1) 55 gallon drum of Part A

(1) 55 gallon drum of Part B

228 bags of PLASITE 5300 Series Aggregate

15 cartons of measuring tool

COVERAGE

Coverage based on a normal surface at 1/8in./3mm. A standard unit will cover 132 sq.ft/1/8 in/12.3 sq.m A 1/2 bulk unit will cover 1250 sq.ft/116.2 sq.m A 3/4 unit will cover 1875 sq.ft/174.3 sq.m A bulk unit will cover 2500 sq. ft/232.4 sq.m

August 2006 replaces August 2003

To the best of our knowledge the technical data contained herein is true and accurate on the date of publication and is subject to change without prior notice. User must contact Carboline Company to verify correctness before specifying or ordering. No guarantee of accuracy is given or implied. We guarantee our products to conform to Carboline quality control. We assume no responsibility for coverage, performance or injuries resulting from use. Liability, if any, is limited to replacement of products. NO OTHER WARRANTY OR GUARANTEE OF ANY KIND IS MADE BY CARBOLINE, EXPRESS OR IMPLIED, STATUTORY, BY OPERATION OF LAW, OR OTHERWISE, INCLUDING MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE. Carboline® and Plasite® are registered trademarks of Carboline Company.

PLASITE® 5306

Polyamine Cured Epoxy Lining

MIXING

The primer, liner and gel coat Part A's are the same material and are packaged with equal quantity. The same is true for the Part B's.

Primer

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

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.

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).

IMPORTANT! Mixed materials remaining in container will produce heat and may smoke. Keep away from combustible materials. Do not reseal containers!

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.

Note: If primer hardens prior to liner application, the surface must be whip blasted again before applying liner.

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 5306 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 the edge as you prime substrate.

CURE TIME

Hardening Time: 8 Hours at 70°F/21°C

Curing Time: 72 Hours at 70°F/21°C

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

CLEAN UP

Cured or hardened PLASITE 5306 is almost impossible to remove. Clean tools immediately with hot, soapy water or PLASITE Thinner #71.

STORAGE TEMPERATURE

PLASITE 5306 should not be stored at temperatures below 25°F/-4°C or higher than 85°F/29°C for long periods of time. Storage life is 12 months at 70° F/21°C.

Prior to application, all three components and equipment must be stored at 70-85°F/21-29°C for at least 48 hours.

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/21°C before holiday testing.

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.



350 Hanley Industrial Court, St. Louis, MO 63144-1599 314/644-1000 314/644-4617 (fax) www.carboline.com

