

TYPE

100% solids aggregate-filled 1/8" trowel applied epoxy polyamine high-strength monolithic immersion liner.

INTENDED USE

Formulated for optimum chemical resistance to the chemical exposures found in the immersion and highly corrosive environments of municipal wastewater treatment.

ADVANTAGES

Trowel or spray applied, non-sagging liner, applied to steel or (damp or dry) concrete. One coat application produces 1/8" thick protective liner on vertical, horizontal or overhead surfaces.

COLOR Oxide Yellow.

MIXING RATIO Premeasured.

COVERAGE

PLASITE 5371 is packaged in premeasured units. One unit will cover 32.3 ft² at 1/8" thickness (theoretical). Actual coverage may vary, depending on condition of concrete.

SET TIME

10 to 12 hours at 70°F. Prior to water or chemical exposure, allow a minimum of 24 hours at 70°F. For temperatures between 50°F and 70°F, cure a minimum of 48 hours.

SURFACE PREPARATION**Steel**

Remove all oils and greases or other contaminants that may interfere with adhesion. Prepare surface by abrasive blasting to SSPC-SP10 (Near White Metal cleaning) to a minimum 4 mil profile.

New Concrete

New concrete must have a minimum of 28 days cure. No curing agents or sealers shall be used unless approved by Carboline. Remove oil, grease, foreign contaminants and loose laitance. Sandblasting with a fine silica sand and reduced pressure will produce a good bonding tooth. Texture of 40 to 60 grit sandpaper is desired with the removal of all glaze. Hydroblasting is acceptable.

Old Concrete

Remove oil, grease, foreign contaminants, previously applied paints and deteriorated mortar. Sandblasting with a fine silica sand and reduced pressure will produce a good bonding tooth. A texture of 40 to 60 grit sandpaper is desired. Hydro-blasting is also acceptable.

Brick Manholes

Remove oil, grease, foreign contaminants, previously applied paints and deteriorated mortar. Sandblasting or hydroblasting shall be performed to obtain a good, sound substrate. Areas in which the old mortar has come loose shall be regouted. All leaking cracks shall be repaired with a water stop material.

All leaks must be stopped prior to PLASITE 5371 application. Contact Carboline for repair recommendations of heavily damaged surfaces.

PACKAGING

PLASITE 5371 is supplied prepackaged in a five-gallon container.

Part A (Liquid Resin): 7.8 lbs. in a 1-gallon container

Part B (Liquid Hardener): 2.8 lbs. in a 1/2 gallon container

Part C (Aggregate Blend): 32.6 lbs. in a bag

Net Unit Weight: 43.2 lbs.

DO NOT SPLIT KITS!

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PHYSICAL SPECIFICATIONS

Pigments: Titanium dioxide, oxide yellow and inerts.

Solids: 100%

Pot Life: 60 minutes at 70°F.

Shelf Life: 12 months at 70°F.

Shipping Weight: Approximately 50 lbs. per unit.

Absorption: <0.03%
(ASTM C-413)

Application Time:

Working Time at 70°F: 30-40 minutes
(ASTM C-308)

Initial Set Time at 70°F: 14 hours
(ASTM C-308)

Bond to Dry or Damp Concrete: Concrete Failure
(ASTM D-4541)

Compressive Strength: 4385 psi
(ASTM C-579)

Flexural Strength: 1200 psi
(ASTM C-580)

Modulus of Elasticity: 30,900 psi
(ASTM C-580)

Tensile Strength: 1529 psi
(ASTM C-580)

Thermal Expansion Coefficient: 3.78×10^{-5} in/in°F

Physical properties were determined on specimens prepared under laboratory conditions using applicable ASTM procedures. Actual field conditions may vary and yield different results; therefore, data is subject to reasonable deviation.

CHEMICAL RESISTANCE

Excellent resistance to water, brine solutions, oils, hydrogen sulfide and acids generated by microbiological sources encountered in municipal wastewater treatment environments.

APPLICATION

PLASITE 5371 should not be stored at temperatures below 25°F or higher than 85°F for long periods of time.

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

Do not apply when surface temperature is below 50°F. Material must be between 70 and 85°F for application.

Mixing

Blend Part B (Hardener) and Part A (Resin) in the five-gallon pail supplied, using a slow speed, paddle-type mixer or a low RPM drill motor mixer. Add Part C (Aggregate) gradually while mixing into Part A/Part B mixture. Mix to uniform consistency.

CAUTION!! Application in direct sunlight and rising surface temperature may result in bubbling, blistering, or pinholes 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.

PLASITE® 5371

When the surface temperatures are rising, it may be necessary to postpone the application or apply during the cooler evening hours.

Trowel or spray apply PLASITE 5371 evenly over surface (building low spots to desired thickness). Apply at approximately 32.3 sq. ft. per unit or 1/8" thick.

After each unit has been applied, back roll with a short nap roller dampened with water to remove trowel marks and produce a smooth finish. Do not wet roller excessively.

Note: Please refer to Plasite PA-5000 for information regarding pipe penetrations, expansion joints, etc.

Trowel

A trowel with rounded corners (referred to as a swimming pool trowel) is recommended.

Spray

Spray equipment is utilized to replace a trowel as the means of transferring the material from the container to the surface. Due to the heavy viscosity of the material, a fine atomization cannot be obtained.

When applying by spray, a trowel wipe of the liner surface prior to back rolling is recommended.

Special equipment is required: Air Tech Spray Systems, P.O. Box 10070, Houston, TX, 77206; 7:1 swinger unit, 1" fluid hose, 3/8" nozzle with air pressure at 100 psi and fluid pressure at 700 psi.

Please contact Air Tech Spray Systems or Carboline Technical Service Department for more information on the spray equipment.

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

For tank lining work or enclosed spaces, 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 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. 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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