product data

carboline®

SANITILE® 5206

Formerly Semstone 5206

PRODUCT DESCRIPTION

SANITILE 5206 is a ¼" trowelable epoxy heavy-duty lining for horizontal surfaces requiring optimal traffic bearing capabilities and a quick turnaround time. This system is applied in a one coat application (over primed concrete) and is self sealing. SANITILE 5206 has excellent resistance to alkalies and caustics, is formulated for areas of extreme chemical attack, and will withstand temperatures of 200°F

TYPICAL USES, APPLICATIONS

Excellent for resurfacing floors in creameries, locker plants, canneries, soft drink bottling plants, bakeries, cheese manufacturing plants, breweries, meat packing plants and pulp and paper mills. It is also used in chemical processing and heavy industrial, high traffic areas. Not intended where aesthetics are a concern.

PRODUCT ADVANTAGES

- Cures quickly to form an exceptionally tough, impact and abrasion resistant surface
- Excellent adhesion to concrete and steel
- Minimum down time
- Non-slip surface
- Sanitary
- Non-shrinking

GOVERNMENT AGENCY ACCEPTANCE

SANITILE 5206 meets the requirements of the U.S. Department of Agriculture (USDA) for use as an incidental food contact system.

CHEMICAL RESISTANCE

Not affected by water, oil, brine, most acids and alkalies. For specific chemical resistance properties, consult Carboline Technical Service Department.

PACKAGING

Primer

SEMSTONE 110 is packaged in 1.5 gallon units and consists of:
1 gallon can of Part A
1 gallon can of Part B (short filled)
Refer to Semstone 110 Product data sheet for mixing, application and curing instructions.

Floor Surfacer

A **"mini-kit"** covers 16 ft^2 @1/4" and is supplied as:
(1) can Part A - resin (0.3 gal)
(1) can Part B - hardener (0.2 gal)
(1) bag Part C - aggregate (30.94 lbs)

A "**standard"** unit (10 mini-kits) covers 160 ft^2 and is supplied as:
(10) cans Part A - resin (0.3 gal each)
(10) cans Part B - hardener (0.2 gal each)
(10) bags Part C - aggregate (30.94 lbs each)

SANITILE 5206 is also available in **½ bulk** and **full-bulk** units.

	½ Bulk	Full Bulk
Part A - resin	21 gal	42 gal
Part B - hardener	14 gal	27 gal
Part C - aggregate	57 bags	115 bags

A ½ bulk unit covers approximately 900 ft^2
A full bulk unit covers approximately 1800 ft^2

PHYSICAL CHARACTERISTICS

Compressive Strength	10,000-11,000 psi (ASTM D695)
Modulus of Elasticity	1.062 x 10^6 psi (ASTM D695)
Tensile Strength	750-1400 psi (ASTM D638)
Flexural Strength	2,800-3,600 psi (ASTM D790)
Thermal Coefficient of Linear Expansion	6.16 x 10^{-6} in./in.°F (ASTM D696)
Solids	100%
Colors	Brown / Red / Light Grey
Shelf Life	.3 months at 70˚F

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:

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 a texture of 40 to 60 grit sandpaper, with the removal of all glaze:

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

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).

Sanitile® 5206

APPLICATION TEMPERATURE
Do not apply when surface temperature is below 35°F. For application, the material must be 70-85°F.

MIXING
SEMSTONE 110 PRIMER
Mix Part A resin with Part B hardener until uniform in color and consistency.

Refer to Semstone 110 Product Data Sheet for mixing, application and curing instructions.

SANITILE 5206
Empty the contents of Part B into Part A and mix thoroughly. Then empty the mixture into a mixer, draining the can for about ½ minute. Start mixer and slowly add Part C and mix approximately 5 minutes.

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
Division of Man U Fab, Inc.
Minneapolis, MN

Kenrich Products
Portland, OR

Important: The working life of the 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!

APPLICATION
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.
As is common with all epoxies and novolacs, under certain conditions such as low temperature and high humidity, the Semstone 110 may develop an oily film on its surface known as a "blush". This blush should be removed by soap and water prior to topcoating.

SEMSTONE 110
Apply to prepared surface using a flat floor squeegee. paint roller, or brush. It is important to obtain the proper coverage and not allow the material to puddle in holes or depressions. Application of the appropriate Carboline overlayment must be completed BEFORE the primer hardens. If the primer hardens before the overlayment is applied, the area must be reprimed. The "open time" for Semstone 110 Primer is approximately 48 hours at 77°F/25°C.

SANITILE 5206
Pour the entire batch onto the surface in a ribbon approximately 10" wide. Spread with a clean steel trowel, applying pressure to spread thoroughly onto surface. Smooth the coating with the trowel holding it almost flat and applying light pressure. Finish each batch as you go. A quality 3"x10" cement finisher's trowel, such as Goldblatt or Marshalltown, is recommended.

EDGES
When possible, cut approximately ½" deep chase or groove into concrete. Chisel a shoulder to the saw cut back approximately 2" to 4". Trowel smooth to meet adjoining floor level. When the feather edge method is used, taper down to meet the adjoining floor level extending the feather edges 1" to 2" beyond overlay.

CURE TIME
SANITILE 5206 will harden within a few hours at 70°F. The warmer the temperature, the faster it cures. Allow to cure 24 hours for light traffic loads and 72 hours for heavy traffic loads and chemical spillage.

CLEAN UP
Cured or hardened SANITILE 5206 is very difficult to remove. Clean tools and equipment immediately with hot, soapy water or industrial solvent (Thinner #2).

STORAGE TEMPERATURE
SANITILE 5206 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 should be stored at 70°F to 85°F for at least 48 hours for best results and ease of mixing.

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

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

January 2006 replaces August 2003