

LAVACRETE SERIES 469

PRODUCT PROFILE

GENERIC DESCRIPTION Epoxy Polymer Concrete

COMMON USAGE Series 469 LavaCrete is a non-shrinking epoxy polymer concrete used for the rehabilitation of severely eroded concrete or for the corrosion proofing of new concrete where chemical resistance is required throughout the complete topping system. Extremely fast setting, allowing for rebuilds of process floors and secondary containment structures. Also used to cast sumps, drains and trenches and is an outstanding grouting material for vibration dampening in base plates and on motor pads. Series 469 kits are packaged for casting and standard placement of material. A grouting mix may be made by adjusting the kit for a more fluid application.

COLORS 904 Medium Gray **Note:** Batch-to-batch color variation can be expected.

FINISH Flat (as poured). **Note:** A semi-gloss finish can be achieved by troweling the surface.

COATING SYSTEM

PRIMERS Series 4667

SURFACE PREPARATION

CONCRETE Prepare concrete surfaces in accordance with NACE No. 6/SSPC-SP13 Joint Surface Preparation Standards and ICRI Technical Guidelines. Abrasive blast, shot-blast, water jet or mechanically abrade concrete surfaces to remove laitance, curing compounds, hardeners, sealers and other contaminants and to provide a minimum ICRI-CSP 5 surface profile. **Note:** A heavier anchor profile may be required for tie-ins and grouting, refer to the application guide for additional information.

ALL SURFACES Must be clean, dry and free of oil, grease and other contaminants. Always take precautions to prohibit the surface from becoming contaminated prior to product application.

TECHNICAL DATA

VOLUME SOLIDS 100% (mixed)

RECOMMENDED DFT 3/8" to 10" (9.7 - 254 mm) in a single pour.

CURING TIME

Temperature	To Handle	Return to Service
90°F (32°C)	4 hours	8 hours
77°F (25°C)	6 hours	24 hours
35°F (2°C)	8 hours	48 hours

VOLATILE ORGANIC COMPOUNDS 0.08 lbs/gallon (9.0 grams/litre)

THEORETICAL COVERAGE Coverage rates based on Casting/Topping Application:
 77 sq ft (7.2 m²) at 3/8" per kit
 58 sq ft (5.4 m²) at 1/2" per kit
 29 sq ft (2.7 m²) at 1" per kit

See APPLICATION for additional coverage rates.

PACKAGING

	Part A	Part B	Part C	Yield (mixed)
Large Kit	5 gallon pail	1 gallon can	4 - 70 lb bags	18.3 gallons (69.2 L)
Small Kit	1 gallon can	Quart Can	1-70 lb bag	4.5 gallons (17.0 L)

Note: To create a grouting material refer to the mixing section for additional information.

STORAGE TEMPERATURE Minimum: 50°F (10°C) Maximum: 75°F (24°C)

TEMPERATURE RESISTANCE (Dry) Continuous 200°F (93°C)

SHELF LIFE 18 months at recommended storage temperature.

FLASH POINT - SETA < 230°F (110°C)

HEALTH & SAFETY Paint products contain chemical ingredients which are considered hazardous. Read container label warning and Safety Data Sheet for important health and safety information prior to the use of this product.
Keep out of the reach of children.

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APPLICATION

COVERAGE RATES

Casting/Topping Application

	Cubic Feet
Large Kit	2.4
Small Kit	0.60

Grouting Application

	Cubic Feet
Large Kit	1.64
Small Kit	0.41

WORKING TIME

Approximately 30 to 40 minutes at 75°F (24°C), & 50% R.H. **Note:** Placement and finishing time is dependent on environmental conditions and temperature of components. Material should be transferred to substrate and placed **immediately** after mixing. **Important:** Do not attempt to retemper the polymer concrete with additional resin or water. Material should be moved quickly from the mixer to the area of placement.

MIXING

Power mix the contents of Series 469 Part A and Part B separately in their original containers prior to combining. Add the Series 469 Part B into the pre-mixed Part A and power mix the material approximately one to two minutes before placing material in a drum mixer or adding aggregate.

Pour entire contents of catalyzed liquid into the mortar mixers tub, making sure to scrape as much resin out of the container as possible. Start the mixing unit on low speed (15-20 rpms) and immediately begin adding Series 469 Part C into the mixer. Allow the first bag to be fully mixed before adding additional bags.

For additional mixing instructions please reference the charts below:

Casting/Topping (Large Kit as supplied):

Part A	Part B	Part C
5 gallon pail (partially filled)	1 gallon can	4 - 70 lb bags

Casting/Topping (Small Kit as supplied):

Part A	Part B	Part C
1 gallon can	Quart can	1 - 70 lb bag

Grouting (Large Kit)

Part A	Part B	Part C
5 gallon pail (partially filled)	1 gallon can	2.5 - 70 lb bags

Grouting (Small Kit)

Part A	Part B	Part C
1 gallon can	Quart can	44 lbs

THINNING APPLICATION

Do not thin or attempt to retemper material.

Topping Application: Projects 200 square feet or less may be trowel applied. Projects exceeding 200 square feet should have mixed material placed in appropriately sized and spaced drops between pre-set guide rails or metal screeds that have been set to the specified depth. The fluid material should be pulled along using a screed board in a sawing and compacting motion. Trowels may be used to assist in packing and the small movement of material. Finishing should begin quickly using a high grade steel trowel, wetted with No. 2 Thinner to assist with smoothing. If material is too resin rich or sticky sand may be broadcast over the surface during finishing.

Casting Application: If Series 469 is to be cast into forms, all forms should be properly built, anchored and caulked for weep spots. Forms should be liberally waxed with release agents or lined with heavy gauge plastic secured to the internal sides. Once the forms are set, proceed with mixing the material per the mixing instructions above. Immediately move mixed polymer concrete to the form and pour into a funnel or head-box. Pour into annular space from one side as this allows for air to escape at the opposite end of the pour. Tamping rods, chains and vibrating equipment should be used to assist in moving and packing the material to limit voids in the polymer concrete once cured. **Important:** Do not cast over 10-inches in depth, contact Tnemec Technical Services for additional information.

Grouting Application: Series 469 can be mixed to create a fluid polymer concrete that allows for good flow into the annular spaces of previously set and leveled baseplates. **Note:** If using this material to restore the surface of a concrete pad prior to baseplate seating, those surfaces should be scarified to an ICRI CSP-8, the existing edges chamfered and framework built prior to application. Work on grouting projects should conform to ACI 351.5-15 "Specification for Installation of Epoxy Grouting Between Foundations and Equipment Bases" published by the American Concrete Institute.

APPLICATION EQUIPMENT

Hand troweling can be accomplished on small projects using steel concrete finishing trowels, broad knives, rubber floats, wooden floats or plastic floats. Plastic bottles for misting the smoothing liquids onto the trowels or on the polymer concrete surface may also be needed.

SURFACE TEMPERATURE

Minimum substrate and ambient application temperature 40°F (4°C) and rising. Do not apply if expected to fall below this temperature within 24 hours of application.

MATERIAL TEMPERATURE

For optimum application, handling and performance, the material temperature during application should be between 60°F and 90°F (15°C and 32°C). Temperature will affect the workability. Cool temperatures increase viscosity and decrease workability. Warm temperatures will decrease viscosity and shorten pot life.

CLEANUP

Flush and clean all equipment immediately after use with No. 2 Thinner or MEK and using plastic scrub brushes on the mixing blades and mixing drum. Sand and the discarded Part C bags can be added to the mixer to help scour the material. Finish with soap and water.

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