



POLYGROUT

PRODUCT DESCRIPTION

SIMIRON POLYGROUT is a patented two-component hybrid polyurea/polyurethane designed for filling the pores, pinholes, pitting, cracks, scratches and gouges to enhance the appearance of polished concrete. When **Polygrout** is applied to concrete it create a permanent densification that will not breakdown like conventional inorganic densifiers.

Polygrout's high solids formulation allows voids in the concrete floor to be permanently filled, creating a higher gloss and depth of image of the finished polished floor. Polygrout can be used on polished concrete or terrazzo floors and blends with the concrete aggregate to create an aesthetically finished floor.

FEATURES & BENEFITS

- Low Viscosity
- Grindable in 1 hour
- Moisture Resistant
- No Odor
- Creates a denser floor
- Improves Gloss
- Improves Depth of Image
- Walkable in 20 min
- Tinted to a variety of colors

RECOMMENDED USES

- Polished Concrete
- Terrazzo Floors
- Cementitious Terazzo
- Self-leveling overlays.
- Concrete Micro-toppings
- Patching under coatings systems

PRODUCT INFORMATION

PHYSICAL DATA	COLOR/FINISH	ITEM NUMBER
Polygrout Neutral 2-Gallon Kit	Neutral	40006594
Polygrout Part A ISO 5-Gallon	Dark Amber	40006600
Polygrout Part B Polyol 5-Gallon	Clear	40006617

*Polygrout is designed to work with Simiron Polytints for polishing.
Add 1 pint Polytint to 5 gallons Base (10 mixed gallons).*

TECHNICAL DATA

PHYSICAL DATA	
Components	2 (ISO & Polyol)
Color	Neutral/Milky
Solids Content	100%
Mix Ratio (by volume)	1:1
Mixed Viscosity	175cP
VOC (EPA Method 24)	< 50

COVERAGE	
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500 – 1,000 square feet per gallon.

Coverage will vary with the condition of the floor, application method, profile and porosity of the surface.

CURE TIMES AT 72°F (22°C)	
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Work Time	15-20 minutes on floor
Tack Free/Walk	20 minutes
Grindable	60 minutes
Light Traffic	10 minutes
Heavy Traffic	30 minutes



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PHYSICAL PERFORMANCE

PHYSICAL PROPERTIES	TEST METHOD	RESULTS
Adhesion to Concrete	ASTM D7234	> 300 psi
Compressive Strength	ASTM D695	6,500 psi
Elongation	ASTM D638	3%
Hardness, Shore D	ASTM D2240	75
Shrinkage	C531	Negligible
Tear Strength	ASTM D624	285 lbs/ft
Tensile Strength	ASTM D638	4,500 psi

SURFACE PREPARATION

Concrete must be sound, clean, dry and free of contaminants such as dirt, dust, grease, oil, silicones and other contaminants that may negatively affect adhesion. Concrete should be a minimum of 28 days old.

Concrete surface should be ground with initial course grits and taken up to a 80/100 metal bond finish. Remove non structurally bonded concrete chips or spalls.

For best results run floor scrubber dry with just aggressive stiff brushes to loosen up any dust that may be embedded into the surface defects and voids then completely vacuum the entire floor. It is not recommended to run a wet scrubber because the concrete slurry could fill into the voids preventing the Polygrout to properly work. Be sure there is no standing moisture in any of the voids because it may cause the material to foam.

It is recommended that the least aggressive diamond tooling possible, such as 50 grit hybrid ceramics/resins, to avoid opening up the concrete to additional pits, holes, or voids.

POPOUTS, VOIDS OR SPALLS

Pop outs, cracks or voids larger than ½" should be repaired by mixing sand with the Polygrout or by using Simiron 850CF.

RANDOM CRACKS

Cracks wider than 1/8" should be cleaned using a crack chasing blade, wire brush or Nylox wheel. Vacuum cracks out entirely and prefill using Polygrout before coating the entire floor to ensure a flush repair.

SAFETY AND TECHNICAL

Refer to the SDS sheet before use. Safety precautions must be strictly followed during storage, handling, and use. Personal protective equipment (PPE) should be worn at all times. PPE will include (but is not limited to): Safety glasses with side shields and high quality nitrile gloves. To acquire additional information or technical and safety data, please visit: www.simiron.com

TEMPERATURE

Air	35° - 95°F	2° - 35°C
Surface	35° - 95°F	2° - 35°C
Material	60° - 85°F	16° - 29°C

**Higher temperatures will shorten pot-life and working time.*

APPLICATION EQUIPMENT

Assemble all equipment. Equipment will include (but is not limited to)

- Drill and Jiffy® type mixing blade
- Flat metal spring blade squeegee or high quality flat EPDM squeegee.



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APPLICATION PROCEDURE

1. Only mix enough material that can be applied in 10-15 minutes. **Polygrout** is a 1 to 1 mix ratio by volume. Premix or shake the Part B. Mix **Polytint** into Part B for 2-3 minutes and then mix Part A into colored Part B for 45 – 60 sec at low speed using a mechanical mixer. Be sure material is thoroughly mixed. Mixing longer than 60 seconds can cause material to catalyze faster and reduce working time.
2. Immediately pour the mixed material onto the floor and spread using a flat and smooth metal blade, ridged trowel, flat stiff squeegee, or window squeegee. Spread the material and then overlap the coated area a second time to be sure all voids are filled in both directions. Closely look for areas that may have not been filled and pass over again. In some circumstances a second coat may be needed to fill voids flush with the surface.
3. Grind off excess **Polygrout** to completely degloss the grout and leave a smooth surface. In standard conditions at 75°F and 45% R.H. surface can be walked on in 20 minutes and ready for grinding in 1 hour. Cooler temperatures and/or lower humidity can slow down the cure time, and warmer temperatures and/or higher humidity can speed up the cure time. It is always best to test a small area to determine that the material is ready to grind off. Trying to remove material that hasn't fully cured may build up residue on grinding tools and smear.

CLEAN UP & DISPOSAL

Clean up mixing and application equipment immediately after use. Use acetone or xylene; do not use alcohol. Follow solvent manufacturer's safety instructions. Be sure to follow all local, state and federal regulations when disposing of materials.

MAINTENANCE

To maintain the appearance and extend the life of the newly sealed surface, it is imperative to have a routine maintenance program. Dirt and debris that is tracked over a finished floor will quickly scratch and dull the surface. Place walk-off mats at entrances. Sweep and mop/scrub floors regularly using soft bristles/pads and a mild cleaner. Some cleaning products and equipment or improper use of these can damage a surface. Remove spills quickly to minimize damage and/or stains. For systems that support parked vehicles or other heavy items on rubber wheels, place a small piece of nonporous material, such as sheet metal or plexiglass between the tires and floor to prevent tire marks. Reapplication may be necessary in heavy traffic areas.

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LIMITATIONS

- ⚠ Do not apply on damp or wet surfaces.
- ⚠ May exhibit color change if exposed to high UV.
- ⚠ Blend with sand if surface defects are greater than 1/8".
- ⚠ More than one coat may be required depending on surface conditions.
- ⚠ Material must be fully set and ground even if coating with epoxy to avoid bubbles and adhesion issues.
- ⚠ Do not apply outside of the recommended temperature and humidity range.
- ⚠ Do not delay in mixing and pouring mixed material onto the floor.
- ⚠ Do not apply over loose or unsound concrete, asphalt or bitumen substrates, glazed tile or nonporous brick and tile, magnesite, copper, metal, polyesters, or elastomeric membranes.
- ⚠ Do not use as a joint filler substitute.

LIMITED WARRANTY

SIMIRON warrants this product to be free from defect in the material that affects its performance for a period of one year (from date of purchase). SIMIRON will replace at no charge the quantity of the Coating that SIMIRON determines has failed to perform, as the sole and exclusive remedy for any breach of this warranty and/or any other defect or failure of the coating. Proof of purchase is required. Cost of labor for application of any product specifically is excluded. Warranty is nontransferable.

SHELF LIFE AND STORAGE

12 months from date of manufacture when stored indoors in the original unopened container at 60°F – 85°F (16°C – 29°C) in a dry location with humidity below 65%.

- ⚠ Do not allow materials to freeze.

TECHNICAL ASSISTANCE



Information is available by calling SIMIRON
Toll Free: 1.866.515.8775 / +1.248.686.3600

PRODUCT DATA SHEET: 11/2023