



Product Data Sheet For:

PLEXIFLEX 100 SG

(Summer Grade, Low Modulus Binder)

Description

PlexiFlex 100 SG is a 2 component 100% solids, low modulus binder, USDA accepted, clear or pigmented epoxy flooring resin designed for color quartz floors and a sealer for concrete. PlexiFlex 100 SG is non-blushing and non-water spotting, bonds to cold damp surfaces and supports heavy industrial traffic. It cures into a very hard solid surface and retains a sufficient amount of resilience to withstand impact and vibration. PlexiFlex 100 SG is the most advanced cyclo-aliphatic amine curing system of its kind. In addition, it is also resistant to fungus, mildew, and is anti-microbial. PlexiFlex 100 SG is suitable where stress and mechanical impact is a concern.

TYPICAL USES

Colored quartz flooring (Decorative)
Broadcast flooring (Shop Floor)
Binder for mortar systems
Primer for mortar systems
Sealing concrete (epoxy sealer)

FEATURES

Good chemical resistance
Convenient 1 to 1 ratio by volume
Tenacious bond to most substrates
Non-blushing / non-water spotting
Low viscosity

Colors

PlexiFlex 100 SG is typically clear but can be tinted by adding 25% of PlexiGlaze Industrial Floor Finish resin. This is referred to as a shop floor resin.

Packaging

PlexiFlex 100 SG is available in 1-gallon cans, 5 gallon pails, and 50-gallon drums

Guide Specifications

This product is part of the Plexi-Chemie, Inc. family of polymer systems. Please contact Plexi-Chemie, Inc. for complete guide specs.

Surface Preparation

As with all epoxies, surface preparation is essential to the long term performance of the product. All concrete must be clean, free from greases, oils and curing compounds. Shot blasting is the preferred method of preparation. In addition mechanical scarifying and removal of existing coatings is essential. Note if degreasing is

required use TSP and a strong detergent. **Acid etching is not allowed.**

Application Method/Spread Rates

PlexiFlex 100 is applied with a notched squeegee, roller and brush. Spread rate will vary with specified thickness. PlexiFlex 100 is used in PlexiQuartz, PlexiGard Shop Floor, PlexiClad and PlexiChip epoxy systems. See application instruction sheet for complete instructions. PlexiFlex 100 is applied at 1/8 - 3/16 inch thick.

Broadcast Summary

(1) Apply PlexiFlex 100 SG to properly prepared surface using a notched squeegee then roll-back. Immediately broadcast aggregate. Allow to cure and repeat step one (1). After cure, sweep excess then seal w/ PlexiGlaze Industrial Floor Finish. Allow to cure, then sand the floor and vacuum. Seal with PlexiCrest P Polyester urethane topcoat.

Limitations

This product is best suited for application in temperatures between 55°F and 95°F. Substrate must be clean, sound, and dry.

Standard Broadcast	1 st Coat	2 nd Coat	Seal Coat
PlexiFlex 100 (ft ² /gal)	40 ft ² /gal	30 ft ² /gal	100 ft ² /gal
Aggregate Broadcast (lbs/ ft ²)	1.25 lbs/ ft ²	1.65 lbs/ ft ²	

Special Purpose Formulations

PlexiFlex 100 Regular – Summer Grade

For use on most typical installations.

PlexiFlex 100 “Cold Set” – Winter Grade

For cold area applications when temperature cannot be maintained over 50 °F, and when a more rapid cure is required at normal temperatures.

Moisture Concerns

Before application of coating use of a calcium chloride test will determine moisture level in the concrete. Please refer to the master **Moisture Guidelines** and **MVB 2000** data sheet for more information.

Chemical Resistance

This product is resistant to many common chemicals. Please refer to the master “**Chemical Resistance Chart**” for actual resistance to specific chemicals/reagents.

Cleaning

This product is considered to be a low maintenance flooring system; however, certain surface textures and serviced environments require specific procedures. Please refer to the master “**Cleaning Guide**”.

CAUTION

Follow the Hazardous materials Identification System labeling guide for proper personal protective equipment to use when handling this product. Use only as directed. KEEP OUT OF REACH OF CHILDREN.

Before using any Plexi-Chemie product, be sure to read the Material Safety Data Sheet.

Technical Information

Color	Clear, can be tinted with PlexiGlaze Industrial Floor Finish Resin
Mix Ratio (by volume)	1 parts resin to 1 part hardener
Viscosity at 70 °F (mixed hardener & resin)	1400 cps
Pot Life at 70 °F	40-60 minutes
Cure Time, Touch Dry at 70 °F (Cold Set)	6-8 hours
Cured Film Thickness	16 mils at 100 sq. ft./gallon spread rate
Salt Spray Resistance, 25% solution at 90 °F	No effect after 100 hours
Toxicity	Non-toxic, USDA approved

Physical Properties

Hardness, Shore D	ASTM D-2240	65-70
Compressive Strength	ASTM D-695	5,950 psi
Flame Spread/NFPA 101	ASTM E-84	Class A
Tensile Strength	ASTM D-638	3,100 psi
Impact Resistance	MIL D -24613	0.0007”, no cracking or delamination
Tensile Elongation, %	ASTM D695	35 - 60 %
Flexural Strength	ASTM D – 790	5,100 psi
Bond Strength to Concrete	ACI-40	Substrate failure
Abrasion Resistance, CS17 Wheel, 1000g load, 1000 cycles	ASTM D-4060	0.29 mg loss
Water Absorption	MIL D-24613	Nil
Coefficient of Friction	ASTM D-2047	0.7 minimum
Thermal Compatibility	ASTM C884	Passes