



PlexiFlex 100 Membrane

Description

PlexiFlex 100 Membrane is a 100% solids, USDA accepted, water-clear epoxy flooring resin designed for color quartz floors and a sealer for concrete. PlexiFlex 100 Membrane is non-blushing and non-water spotting, bonds to cold, damp surfaces, and supports heavy industrial traffic. Although it cures into a very hard solid, it does not become brittle but retains a sufficient amount resilience to withstand impact and vibration. PlexiFlex 100 Membrane 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.

TYPICAL USES

Color quartz flooring
Broadcast flooring
Binder for mortars
Primer for mortar
Sealing concrete

FEATURES

Good chemical resistance
Convenient 2 to 1 ratio by volume
Tenacious bond to most substrates
Non-blushing / non-water spotting
Low viscosity

Colors

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

Packaging

PlexiFlex 100 Membrane 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

This product requires preparation in order to perform as expected. Substrate must be profiled, clean sound, and dry. Substrate must be properly prepared by shot blasting or diamond grinding.

Application Method/Spread Rates

PlexiFlex 100 is applied with a brush, roller, squeegee and trowel. Spread rate will vary with desired thickness. PlexiFlex 100 is a versatile component used in PlexiQuartz, Shop Floor, PlexiClad, and PlexiChip epoxy systems. See application instruction sheet for complete instructions. As a membrane PlexiFlex 100 is applied at 200 square feet per gallon to yield a dry film thickness of 8 mils per coat.

Limitations

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

Special Purpose Formulations

PlexiFlex 100 Regular

For use on most typical installations, for normal use.

PlexiFlex 100 "Cold Set"

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

Temperatures. Should not be used in membranes due to yellowing.

PlexiFlex 100 "Fast"

For quick turnaround time in room temperature areas. PlexiFlex 100 "Water Clear" – Ideal for top coating quartz floors. Has excellent color retention. May be used in warm temperatures when longer working time and pot life is required.

Moisture Concerns

Moisture vapor transmission in the slab should be measured prior to application of polymeric systems to ensure a long lasting, durable installation. Please refer to the master "**Moisture Guidelines**" 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 solution; however, certain textures and service 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)	2 parts resin to 1 part hardener
Viscosity at 70 °F (mixed hardener & resin)	700 cps
Pot Life at 70 °F	20-25 minutes
Cure Time, Touch Dry at 70 °F (Cold Set)	4-6 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	80-85
Compressive Strength	ASTM D-695	11,200 psi
Flame Spread/NFPA 101	ASTM E-84	Class A
Tensile Strength	ASTM D-638	2,100 psi
Impact Resistance	MIL D -24613	0.0007", no cracking or delamination
Tensile Elongation, %	35 ± 5	
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



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