PLEXI-CHEMIE

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PRODUCT DATA SHEET

PLEXI*CRETE* SLBQ

Self-Leveling Broadcast Quartz/Flake System

NO Benzyl Butyl Phthalate

Description

Plexi*Crete* SLBQ (Self-leveling Broadcast Quartz/Flake) is a four component, notch trowel applied decorative urethane mortar resurfacer. PlexiCrete SLBQ is comprised of urethane-urea binders, special pigments, brightly colored quartz aggregate and a high performance clear urethane or novolac epoxy sealer. PlexiCrete SLBQ is a 1/4 inch nominal that exhibits high chemical and thermal shock resistance, excellent abrasion, thermal cycling and with a wide range of caustic and acid resistance.

Leader in BBP (Benzyl Butyl Phthalate) free seamless urethane mortar flooring.

Typical Advantages

- **Chemical Resistance** – polyurethane technology provides superb protection against caustics, organic and inorganic acids, solvents and most chemicals used today in industry.
- **Thermal Shock Resistance** – Plexi*Crete* SLBQ and concrete have a similar coefficient of thermal expansion from under -50° F to 285° F. Plexi*Crete* SLBQ withstands continuous hot water wash downs. Hot cooking oil and steam resistance.
- **Impact Resistance** – while epoxy and vinyl esters can crack and spall, Plexi*Crete* SLBQ will absorb an impact and distribute the force throughout the system.
- **Downtime** – no primers or sealers are required due to the resin-rich properties. Fast curing in less than 6 hours.
- **Non-Slip** – the surface can be customized to any facilities requirements – from decorative self-leveling to aluminum-oxide solid broadcast.
- **Odorless Materials** – no tainting of food products due to freedom from objectionable odors during application.
- **Thermal Comfort** – Plexi*Crete* SLBQ provides superior insulation over concrete or other plastic flooring systems.
- **Hygiene** – Plexi*Crete* SLBQ eliminates tile joints, minimizes cracking as occurs in traditional monolithic flooring, and reduces potential bacteria growth.
- **Hydrostatic Pressure** – Plexi*Crete* SLBQ will withstand up to 14 lbs. of vapor transmission in the slab without delamination. It also allows the concrete to breathe and is a solution for many moisture problems.
- **Can be applied to "green" concrete**
- **Antimicrobial** – Plexi*Crete* SLBQ is available with Bio-inhibitor antimicrobial. This treatment will provide the floor with long-term protection against a broad spectrum of bacterial and fungal attack. It is formulated into the flooring system from the basecoat up through the topcoat.

Chemical Resistance

Plexi*Crete* SLBQ flooring systems resist spills and in many cases immersion of:

Acid (Lactic, Citric, Acetic)	Alkali
Hydrochloric	KOH
Phosphoric	Ammonium Chloride
Sulfuric	Sodium Hydroxide
Hydrogen Peroxide	Ammonium Hydroxide

Alcohol (Ethyl, Propyl, Isopropyl, Butyl)

Also resists hot fatty oils, diesel fuel, and organic solvents (MEK, Acetone, Toluene)

Note: Full chemical resistance chart available upon request

Areas of Application

- Animal Rooms/Shelters
- Food & Beverage (FDA/USDA Accepted)
- Bakery
- Food Processing
- Dairy
- Meat and Poultry Processing
- Soda & Juice Facilities
- Brewery
- Prepared Foods
- Commercial Kitchens
- Chemical Processing
- Secondary Containment
- Pharmaceutical
- Pulp & Paper
- Restrooms and Concession Stands

Surface Preparation

Prepare concrete by mechanical means only. Shot blast, scarify, diamond grinding are the required preparation methods. No other preparation method is acceptable for the

long term success of any floor. Substrate must be free of all contamination or bond breaking substances including but not limited to dust, latency, curing compounds, coatings, sealers, oil or grease. All spalled or deteriorated concrete should be removed by chipping hammers then patched with an epoxy patching material such as Plexi-Chemie's Patch-All patching system.

Application

1. Prepare substrate properly in accordance with instructions above.
2. Install optional cove base as required.
3. Install system by hand steel trowel.
4. Broadcast Plexi*Crete* SLBQ aggregate evenly to excess, by hand or by mechanical blower, into the wet receiving coat of Plexi*Crete* SLBQ urethane making sure the entire floor is covered to saturation with aggregate.
5. Allow curing and thoroughly vacuum off the excess unbound aggregate.
6. If needed, repeat broadcast layer to establish uniformity with Plexi*Glaze* #4.
7. Apply clear grout coat by squeegee with light back roll with a tight nap roller. Allow to cure 8 – 10 hours.
8. Apply clear finish. Additional finish coats may be applied depending upon smoothness of surface desired and/or chemical resistance required.

Cleaning and Maintenance

Do not expose Plexi*Crete* SLBQ system to any chemicals until the full curing time of 7 days has passed. Regular cleaning and maintenance will prolong the life of all polymer-flooring systems, enhance appearance and reduce any tendency to retain dirt.

Safety

Safe storage, handling, and use dictate that adequate health and safety precautions are observed with this product. User is specifically directed to consult the current Safety Data Sheet for this product as well as precautions contained on product labeling.

Storage and Shelf Life

Approximately six (6) months from date of manufacture when stored in its unopened original containers in a dry place at temperatures between +10ºC and +30ºC.

Colors

Plexi*Crete* SLBQ is available in a variety of colors. Standard colors are Tile Red and Granada Gray.

Broadcast Colors

Range of color quartz available for broadcast. See Plexi-Chemie color chart.

Typical Physical Properties

Compressive Strength	ASTM C-579	9,200 psi
Adhesion Pull Test	ASTM D-7234	>536 psi (break in concrete) 24 hrs.
Heat Resistance Limitation	Continuous Exposure	220°F
Tensile Strength	ASTM C-307	4,200 psi
Coefficient of Thermal Expansion	ASTM C-531	1.5×10^{-5} °F
Coefficient of Friction	ASTM D-2047	.73 dry .65 wet
Resistance to Fungi Growth	ASTM G-21	passes, rating of one
Impact Resistance	ASTM D-2794	no visible damage or deterioration >160 inch-pounds
Flexural Strength	ASTM C-580 ASTM D-790	3,800 psi 6,000 psi
Modulus of Elasticity	ASTM C-469	1.8×10^{5} psi
Water Absorption	ASTM C-413	<0.1%
Abrasion Resistance	ASTM D-4060 CS-17 Taber @ 1000 cycles	.12 grams loss
Resistance to Elevated Temperatures	MIL-D-3134	No slip or flow
Adhesion	ASTM D-4541	>500 psi 100% concrete failure, exceeds concrete
Flammability	ASTM D-648	Class 1, Self-extinguishing
Hardness	ASTM D Shore D-2240	80-85
VOC Content		0 g/l
Cure Time @ 70º F Full Service		6 Hours Foot Traffic and 16 hours Full Service
Working Time @ 70º F		20 Minutes
Slip Resistance Index	ASTM F-1679	>1.0