



POLYMERICA

INCORPORATED

POLYMERICA PRODUCT DATA

LevelMaster SLE

Self-Leveling
Epoxy Surfacing

PRODUCT PRESENTATION

LevelMaster SLE is a pigmented, self-leveling epoxy surfacing designed to renovate worn concrete floors or protect new concrete against moderate wear and mild chemical spills.

LevelMaster SLE is installed at a nominal 1/16" to 1/8" thickness consisting of:

- ▶ A 100% solids epoxy primer
- ▶ A self-leveling epoxy-silica mixture
- ▶ Optional aggregates and seal coats for specified finish and texture

SLE can be installed as a self-sealing system, broadcast with silica and resealed to produce a solid-colored texture system, or broadcast with multi-colored quartz aggregates and sealed with a clear sealer to produce a decorative surface.

In solid colors, **LevelMaster SLE** can be coated with **MasterShield CRC** or **NEC** to provide improved performance against moderate chemical spills.

PRODUCT FEATURES

- ▶ Economical and durable
- ▶ Excellent color retention
- ▶ Fast and easy installation
- ▶ Will not support growth of fungus or bacteria. Also available in anti-microbial formula.
- ▶ Can be applied to a damp surface
- ▶ USDA compliant for use in federally inspected meat and poultry plants
- ▶ Approved by Agriculture Canada Food Production and Inspection Branch for use in registered establishments

USES

LevelMaster SLE is a durable, cost-effective, heavy duty floor surfacing that will provide a performance level between that of a troweled surfacing and thin mil coating system.

SLE offers long-term, low-maintenance service for light industrial commercial, and institutional flooring applications.

SLE is easily textured to provide sure footing in areas subject to spills and washdowns.

LevelMaster SLE is ideal for use in clean rooms, light manufacturing and assembly, warehouses, workshops, mechanical rooms, laboratories, and a variety of commercial and retail applications.

LIMITATIONS

- ▶ Substrate must be sound, clean, properly prepared, and free from high levels of moisture vapor transmission or hydrostatic pressure.

As is the case with any impermeable floor coating, any concrete slab on grade to receive this product should be tested for moisture content while in the planning and estimating stages. Product should only be installed if moisture content falls within acceptable range or where **MVP** can be used as a primer. Consult **POLYMERICA Bulletin SP-C** for details.

- ▶ Minimum application temperature is 40°F. Below 65°F, handling characteristics are affected and cure times lengthened
- ▶ Chemical exposure, service temperatures, mechanical abuse, and housekeeping influence service life

PERFORMANCE CHARACTERISTICS OF SYSTEM

Compressive Strength @ 7 days (ASTM C579).....	11,500 psi.
Tensile Strength (ASTM C307).....	2,250 psi.
Flexural Strength (ASTM C580).....	4,500 psi.
Bond Strength (ACI 503R).....	350 psi.
Thermal Coefficient of Expansion (ASTM D696).....	concrete fails 0.000046 inch per inch per 0oF
Abrasion Resistance (ASTM D4060)..... CS17 wheel, 1 kg. load,1000 rev.	0.1 gm. maximum weight loss
Thermal Shock Resistance (ASTM C884).....	passes
Water Absorption (ASTM C413).....	0.1%
Flammability (ASTM D635).....	Self-extinguishing
Impact Resistance (MIL D3134F).....	16 foot-pounds concrete fractures
Indentation (MIL D3134F).....	No indentation

CHEMICAL RESISTANCE

Reagent	Rating	Reagent	Rating
Acetic Acid-5%.....	L	Lactic Acid-15%.....	R
Acetone.....	L	Methyl Ethyl Ketone.....	L
Bleach.....	L	Nitric Acid-10%.....	R
Citric Acid - 50%.....	L	Skydrol.....	R
Crude Oil.....	R	Sodium Hydroxide-50%.....	R
Diesel Fuel.....	R	Sulfuric Acid-30%.....	R
Ethylene Glycol.....	R	Toluene.....	L
Fatty Acids.....	L	Urea.....	R
Gasoline.....	R	Vinegar.....	L
Hydrochloric Acid - 15%.....	R	Xylene.....	L

R - Recommended for continuous service. L - Limited recommendation, occasional spills.

This chart is intended as an aid in evaluating the performance of these systems in various chemical exposures at 75°F. The data is intended as a guide only. In severe or combination exposures, a sample should be tested under actual or simulated use conditions.

Product data is revised as needed to reflect the most recent technology and field experience. Consult **POLYMERICA** for current printing date of literature.

SLE LIQUIDS:

Unit Size	Part A	Part B	Weight*
3 gallon	1x2	1x1	36bls.

AGGREGATE (SLF):

SLF aggregate is packaged in 50# bags
see next page for mixing details

*approximate shipping weight

ESTIMATING & APPLICATION GUIDELINES

System	Step one	Step two	Step three	Step four
	Primer (optional)	Slurry	Broadcast	Finish Coat
Uncoated - 1/16"	IEP-LV or EPS	SLE	N/A	N/A
Textured - 1/8"	IEP-LV or EPS	SLE	Silica	SLE
Decorative	IEP-LV or EPS	SLE	MQB-F	DEC*
Mix Ratio	3A : 1B	2 gal. SLE Part A 1 gal. SLE Part B up to 50# SLF**	N/A	2A : 1B
Coverage***	180-225 ft ² /gal.	135 ft ² @ 1/16"	200-300 ft ² /100#	75-125 ft ² /gal.
Requirements	4-5 gals.	3x3 gal. kits	350-500 lbs.	8-14 gallons
Pot Life	20 min	30 min	N/A	30 min
Cure to next step @ 70°F	4-8 hours	none for 1/8" 10-16 hrs for 1/16" system	6-9 hours	10-16 hrs Full chemical cure 3-5 days

NOTES *Other clear coatings can be used to add resistance to chemicals, UV, or to provide various gloss levels.

▶ **SLF is a blend of fine silicas. Level of filler can be adjusted for workability. Less filler will reduce coverage.

***Coverage and requirements are dependant upon substrate condition and desired finish and texture.

NOTE:As is the case with all blended aggregates, it is recommended that MQB-F should be premixed prior to use

APPLICATION

Preparation: Concrete must be structurally sound and clean. Preferred method includes abrasive blast or water blast cleaning. Do not apply this or any impermeable finish over an on-grade slab with high moisture or RH levels. Consult **POLYMERICA** Bulletin SP-C for complete details.

Step One: Use of a primer is recommended with rough or porous substrates. Premix components, then mix primer A & B with a low speed drill equipped with a Jiffy Mixer for two minutes. Pour onto substrate in ribbons and apply with squeegee. Cut in with brush, and back roll with a short nap roller. Do not puddle. Application rate should be 7-9 mils or 180-225 ft² per gallon, but will vary depending upon the condition of the substrate. A light broadcast of silica into wet primer will facilitate next step. Allow to tack. Proceed to next step within 24 hour window or sanding and tack wiping will be necessary for adhesion.

Step Two: Premix components, then blend **SLE** Parts A & B with a low speed drill equipped with a Jiffy Mixer for one to two minutes. Add **SLF**, blending for an additional minute, making sure aggregate is fully wetted out. Pour onto floor surface in ribbons and level with a screed rake. De-aerate with a porcupine roller. If using a broadcast for a textured surface, proceed to next step immediately.

Step Three: Broadcast silica or MasterQuartz **MQB-F** to excess. Allow to cure. Sweep and vacuum up loose aggregate.

Step Four: Premix components, then blend coating components A & B with a Jiffy Mixer for two minutes. Pour onto floor in ribbons, distribute with a notched squeegee and lightly backroll with a short nap roller to smooth out roller marks.

CARE & MAINTENANCE

Newly installed floors should be cured a minimum of 48 hours at 70°F - 75°F before wash-downs. Only warm water should be used to clean within the first week.

If the use of a detergent is absolutely necessary during the first week, use **only a MasterShield PSD or a pH neutral** cleaner dissolved in water. Sanitizing detergents containing chlorine or hypochlorite **must not be used** for at least 7 days.

Again, only if absolutely necessary, cleaning may be accomplished with **MasterShield PSD**, a non-chlorinated cleaner.

REGULAR MAINTENANCE

Good housekeeping practices and regular spill removal will prolong the service life of the floor. **While polymer flooring often requires less maintenance than other finishes, cleaning and spill removal must be performed.**

Stains should be removed as soon as possible, but only after determining the cause of the stain and selecting the proper method of stain removal. The following maintenance should be performed on a weekly basis or as needed:

- ▶ Remove spills at earliest opportunity.
- ▶ Sweep or vacuum loose dirt and debris
- ▶ Clean floor with **MasterShield PSD** or another pH neutral cleaner, dissolved in water as directed by cleaner manufacturer. A mild, non-sudsing detergent is generally best. Proper cleaners should be selected for specific spills or stains.
- ▶ Power scrub surface, then rinse with a pressure washer. **CAUTION:** Certain stiff-bristled brushes can affect gloss of finish when used with power scrubbing tools. Consult with janitorial supplier for brush recommendation.
- ▶ Change soap solution and rinse water frequently. Remove rinse water with a wet vacuum or squeegee. Keep mop heads and maintenance equipment free of accumulated dirt.
- ▶ Floors can be sealed, waxed, and buffed, if desired. A local janitorial supply house is a good source for supplies. **All materials for cleaning and sealing should be tested in a small area prior to use.**

COLORS

Solid Colors: All MasterShield colors (see color card)
Decorative: 8 standard (see color card)

Custom colors are available.

SAFETY

Material Safety Data Sheets are available from **POLYMERICA** and should be consulted prior to use of the product. These products are intended for use by professionals only. Keep away from children and those not trained in the use and potential hazards involved.

MasterShield IEP, DEC and LevelMaster SLE are two-part epoxy systems. Part A contains epoxy resins. Part B contains amine-epoxy adducts. Workers should wear gloves, goggles and body covering clothing when mixing or applying product. Clean up with soap and warm water. **LevelMasterFillers** contain silica which can cause lung damage. Dust masks should be worn when handling. Be sure to follow all label and MSDS cautions.

WARRANTY

POLYMERICA warrants its products to conform to its manufacturing standards. **POLYMERICA** will replace or refund the purchase price of non-conforming products at the seller's option; such remedy being exclusive of all others and sole remedy available to the buyer. Buyer hereby expressly waives claim to additional damages. Any claim under this warranty must be made in writing within 7 days of discovery of noncompliance and no later than one year from the date of delivery of product. No representative, distributor or applicator of these products is authorized to modify product data or warranty.

IMPORTANT NOTICE

These products are sold subject only to the express warranties contained herein. There are no other warranties by **POLYMERICA** of any nature whatsoever, expressed or implied, including any warranty of merchantability or fitness for a particular purpose in connection with this product. Buyer agrees that seller assumes no liability for remote or consequential damages of any kind which result from the use or misuse of this product. Information contained herein is based on data believed to be reliable, however, it is the Buyer's responsibility to satisfy itself of the suitability of the product for a particular purpose.

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