**DESCRIPTION**

Liso is a blend of specialty cements, portland cement, polymers and proprietary admixtures designed for filling and smoothing interior and exterior vertical concrete surfaces and non-wearing horizontal surfaces. Liso exhibits superior workability by maintaining a smooth, creamy consistency for easy troweling, rubbing or spreading. After applying, Liso may be sanded to achieve an exceptionally smooth finish. Its unique self-curing mechanism allows for rapid painting and sealing.

**USES**

- Resurfacing, rubbing and finishing of precast and tilt-up concrete products
- Cementitious rub for defective concrete formwork
- Refinish old, vertical, concrete surfaces
- Fill in pits, voids, chipped edges and defects in concrete and masonry
- Can be applied in applications from feathered edge to 1/2" thickness in confined void-filling applications such as air voids or bugholes resulting from poor consolidation

**BENEFITS**

- Color: Consistent light gray color match for concrete
- Adhesion: Polymer modified for increased adhesion so paints and coating bond easily
- Smooth: Maintains moisture for easy finishing
- Self-Curing: Paint or seal as soon as dry
- Consistent: Strict Quality Control testing and standards

**SURFACE PREPARATION**

All surfaces in contact with Liso shall be free of dirt, oil, grease, laitance and other contaminants that may act as bond-breakers. All unsound concrete should be removed to ensure a good bond. Moisten area prior to application. Always apply a test patch. Maintain contact areas between 50°F (10°C) and 90°F (32°C) prior to repair and during initial curing period.

**COVERAGE**

One 50 lb (22.7 kg) bag will cover approximately 115 ft² at 1/16" thickness. Coverage may vary depending on porosity of surface.

**MIXING**

For best results, use a mechanical mixer with rotating blades or use a heavy-duty 1/2" (15 mm) (or larger) low-speed, corded drill and mixing paddle #6 per ICRI Technical Guideline 320.5. Pre-wet mixer and empty excess water. Place 6-8 quarts of cool, clean potable water per 50 lb (22.7 kg) bag in mixer or mixing container, then add dry material. Mix on low RPM for a total of 3 to 5 minutes until a homogeneous mixture is achieved. Mix only enough material that can be placed within working time. Do not blend excess water as this will cause bleeding and segregation. Do not use any other admixtures or additives.

**PLACING (continued)**

SPEC Quickset to within 1/2” of final repair. Install in one consistent application for best color match. Material performs best when applied at cool periods in the day. Do not add water to applied material. Introducing water to already applied material will result in discoloration.

**FINISHING AND CURING**

Liso is a self-curing product. It requires no special curing products or procedures. Finishing applications such as painting or sealing can begin as soon as Liso is dry to the touch.

**STORAGE**

Normal cement storage and handling practices should be observed. Store material in an interior, cool, dry place. Shelf life is one year in original, unopened container.

**LIMITATIONS**

In addition to limitations already mentioned, please note the following. Do not apply when the surface or ambient temperature is below 50°F (10°C) or expected to fall below 50°F (10°C) within 48 hours. Do not apply over surfaces that are frozen or contain frost. Do not apply over any active faults or cracks in the substrate without addressing any movement that may occur. Allow concrete to fully cure for 28 days before use of this product. This material is not intended for use as a horizontal wearing surface. Setting time will speed up in hot weather and slow in cold weather. For hot and cold weather applications, contact your US SPEC manufacturer’s representative.

**Packaging:** 50 lb (22.7 kg) bag, 28 bags per pallet
PHYSICAL PROPERTIES
All Physical Property testing performed in laboratory conditions of 73.5 ± 3.5°F (23 ± 2°C) and a relative humidity no less than 50% unless otherwise determined by the test method or specification. All results represent Liso with 8 quarts water unless listed otherwise. Tests are conducted under standardized conditions for comparative purposes, and results may not be representative of performance under field conditions.

<table>
<thead>
<tr>
<th>Property and Test Method</th>
<th>Compressive Strength</th>
<th>Rate of Set</th>
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</thead>
<tbody>
<tr>
<td>Compressive Strength</td>
<td>1 Day</td>
<td>Initial</td>
</tr>
<tr>
<td>ASTM C109</td>
<td>1,300 psi</td>
<td>1:15</td>
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<tr>
<td></td>
<td>(8.96 MPa)</td>
<td></td>
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<tr>
<td></td>
<td>7 Days</td>
<td>Final</td>
</tr>
<tr>
<td></td>
<td>1,700 psi</td>
<td>2:10</td>
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<tr>
<td></td>
<td>(11.72 MPa)</td>
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<tr>
<td></td>
<td>28 Days</td>
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<tr>
<td></td>
<td>2,000 psi</td>
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<td></td>
<td>(13.79 MPa)</td>
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</tbody>
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DANGER
This product contains Crystalline Silica (CAS# 14808-60-7) and Portland Cement (CAS# 65997-15-1). Harmful if swallowed. Causes skin irritation. Causes serious eye damage. May cause an allergic skin reaction. May cause cancer. May cause respiratory irritation. Causes damage to organs through prolonged or repeated exposure. Do not eat, drink or smoke when using this product. Wash hands thoroughly after handling. Contaminated work clothing must not be allowed out of the workplace. Do not handle until all safety precautions have been read and understood. Wear protective gloves/protective clothing/eye protection/face protection. Use only outdoors or in a well-ventilated area. Do not breathe dust. Keep away from children. Store locked up. Store in a well-ventilated place. Keep container tightly closed. Dispose of contents/container in accordance with local/regional/national/international regulations.

WARNING: Cancer and Reproductive Harm - www.P65Warnings.ca.gov

FIRST AID
If swallowed: Immediately call a poison center/doctor. Rinse mouth. If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a poison center/doctor. If on skin: Wash with plenty of water. Take off contaminated clothing and wash it before reuse. If skin irritation or rash occurs: Get medical advice/attention. If inhaled: Remove person to fresh air and keep comfortable for breathing. Call a poison center/doctor if you feel unwell.

MANUFACTURER/TECHNICAL SERVICE
Contact your US SPEC manufacturer’s representative for the most current product information. Always read and follow the warnings and instructions on the most current technical data sheets and safety data sheets (SDS), available online at www.usspec.com.

US MIX Co.
112 South Santa Fe Drive
Denver, CO 80223
Tel: 303.778.7227 Fax: 303.722.8426
Web Site: www.usspec.com

NOTICE OF LIMITED WARRANTY US MIX Co. (manufacturer) warrants to buyer that this product at the time and place of shipment is of good quality and conforms to the manufacturer’s specifications in force on the date of manufacture when used in accordance with the instructions hereon. Manufacturer cannot warrant or guarantee any particular method of use, application or performance of the product under any particular condition. This limited warranty cannot be extended or amended by manufacturer’s sales people, distributors or representatives or by any sales information, specifications of anyone other than the manufacturer. Liability under this warranty is expressly limited to refund of the purchase price. See product packaging for complete limitation of warranties and liability.