SONOLASTIC®
SL 2™
Multi-component self-leveling and slope-grade elastomeric polyurethane sealant for horizontal joints

Where to Use SL 2™
- Concrete expansion joints
- Metal expansion joints
- Sidewalks
- Pavements
- Decks
- Parking ramps
- Precast double T’s
- Cantilever decks
- Warehouses
- Balconies
- Industrial applications
- Interior or exterior

Features
- Movement capability ±25%...
- Abrasion resistant...
- Resists penetration...
- Resilient …
- Service range from -40°F to 180°F (-40°C to 82°C)...
- Resistant to weathering and aging...
- Available in custom colors...
- Self-leveling and slope grade...

Benefits
- Expands and contracts with joint movement
- Handles pedestrian and vehicular traffic
- Withstands pressure from pointed objects
- Resists permanent deformation
- Suitable for all climates
- Long performance
- Can be color matched to any substrate
- Versatility in applications
How to Apply SL 2™

Joint Preparation
1. The number of joints and the joint width should be designed for a maximum of ±25% movement.
2. The depth of the sealant should be 1/2 the width of the joint. The maximum depth is 1/2” (13 mm) and the minimum is 1/4” (6 mm). Refer to Table 1.
3. In deep joints, the sealant depth must be controlled by Closed-Cell Backer-Rod or Soft Backer-Rod. (See form No. 1017927 and 1017923.) Where the joint depth does not permit the use of backer-rod, a bondbreaker (polyethylene strip) must be used to prevent three-point bonding.
4. To maintain the recommended sealant depth, install backer-rod by compressing and rolling it into the joint channel without stretching it lengthwise. Closed-Cell Backer-Rod should be about 1/8” (5 mm) larger in diameter than the width of the joint to allow for compression. Soft Backer-Rod should be approximately 25% larger in diameter than the joint width at the sealant does not adhere to it, and no separate bondbreaker is required. Do not prime or puncture the backer-rod.

Surface Preparation
1. It is essential that joints be clean and dry. Joint surfaces must be structurally sound, fully cured, and free of all loose aggregate, paint, oil, grease, asphalt, wax, mastic compounds, waterproofing compounds, form release materials, curing compounds or any other contaminants.
2. New concrete: Remove all loose material from joints by wire brushing. Sandblast surfaces in contact with form release agents. Fresh concrete must be fully cured. Laitance must be removed by abrading.
3. Old concrete: For previously sealed joints, remove all old material by mechanical means. If joint surfaces have absorbed oils, remove sufficient concrete to ensure a clean surface.
4. Priming
   1. Joint surfaces must be primed with Primer 733 (see Form No. 1017962) before sealing. If the surfaces are other than masonry or concrete, test first to determine adhesion. Technical assistance is available from ChemRex®.
   3. Allow approximately 15 – 30 minutes drying time before applying sealant. (Primer should be tack-free.) Sealant must be applied same day as primer.
5. To minimize contamination of adjacent surfaces, apply masking tape and remove before sealant has begun to thicken and set.

SL 2™ is a three-component system and must be thoroughly mixed before use. The oversize base container allows for the addition and mixing of Part B and Sonolastic® color pigment into Part A. Note: Sonolastic® color packs are not added to pretinted SL 2™.

1. 1-1/2 gallon (5.7 L) unit: (1) Transfer Part B to Part A container using a spatula or knife. It is imperative that the entire contents of Part B be combined with Part A. (2) With a slow-speed drill and a sealant mixing paddle, thoroughly mix 2 – 3 minutes. The paddle blade must be kept below the surface of the sealant to avoid whipping in air. (3) Transfer the contents of the Sonolastic® pigment into the mixed Part A and B. Use a spatula or knife, removing the entire contents to ensure consistent color. (4) Continue mixing with a slow-speed drill and sealant paddle until color is uniform. During the process, scrape the sides and bottom of the Part A container can and the paddle itself several times.

Mixing

SL 2™ is a three-component system and must be thoroughly mixed before use. The oversize base container allows for the addition and mixing of Part B and Sonolastic® color pigment into Part A. Note: Sonolastic® color packs are not added to pretinted SL 2™.

1. 1-1/2 gallon (5.67 L) unit: (1) Transfer Part B to Part A container using a spatula or knife. It is imperative that the entire contents of Part B be combined with Part A. (2) With a slow-speed drill and a sealant mixing paddle, thoroughly mix 2 – 3 minutes. The paddle blade must be kept below the surface of the sealant to avoid whipping in air. (3) Transfer the contents of the Sonolastic® pigment into the mixed Part A and B. Use a spatula or knife, removing the entire contents to ensure consistent color. (4) Continue mixing with a slow-speed drill and sealant paddle until color is uniform. During the process, scrape the sides and bottom of the Part A container can and the paddle itself several times.

Clean Up
1. Immediately after use and before sealant has cured, clean equipment with Reducer 990 or xylene.
2. The cured sealant may be removed by cutting with a sharp-edged tool, thin films by abrading.

Curing
Cure time will vary with humidity and temperature. Initial cure is 24 hours and complete cure takes approximately 7 days. Cure rates are dependent upon temperature and humidity. Protect joint from dirt and traffic until cured.

For Best Performance
- Do not allow SL 2™ sealants to come into contact with alcohol-based materials or solvents.
- Do not apply polyurethane sealants in the vicinity of uncured silicone sealants.
- SL 2™ is not intended for continuous immersion in water. Contact Technical Service for recommendation.
- For slopes up to 12% use SL 2™ Slope Grade. For slopes over 12% use NP 2™ sealant (see Form No. 1017911).
- Use only Sonolastic® color packs intended for use with SL 2™.
- Make certain the most current version of this data guide is being used; call Customer Service (1-800-433-9517) to verify the most current version.
- Proper application is the responsibility of the user. Field visits by ChemRex® personnel are for the purpose of making technical recommendations only and are not for supervising or providing quality control on the job site.

<table>
<thead>
<tr>
<th>Joint Width and Sealant Depth</th>
<th>Working Times</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Standard Conditions</td>
</tr>
<tr>
<td></td>
<td>73°F (23°C)</td>
</tr>
<tr>
<td>No accelerator</td>
<td>1-1/2 to 2 hours</td>
</tr>
<tr>
<td>1 accelerator</td>
<td>30 minutes to 45 minutes</td>
</tr>
<tr>
<td>2 accelerators</td>
<td>30 minutes to 45 minutes</td>
</tr>
<tr>
<td>3 accelerators</td>
<td>—</td>
</tr>
</tbody>
</table>

For Best Performance
- Do not use other caulks or sand as a bottom bed in a joint.
- Do not install when rain is expected before the sealant reaches initial cure (about 12 hours).
- Do not use partial units.
- Use only Sonolastic® color packs intended for use with SL 2™.
- Make certain the most current version of this data guide is being used; call Customer Service (1-800-433-9517) to verify the most current version.
- Proper application is the responsibility of the user. Field visits by ChemRex® personnel are for the purpose of making technical recommendations only and are not for supervising or providing quality control on the job site.

For Best Performance
- Do not allow SL 2™ sealants to come into contact with alcohol-based materials or solvents.
- Do not apply polyurethane sealants in the vicinity of uncured silicone sealants.
- SL 2™ is not intended for continuous immersion in water. Contact Technical Service for recommendation.
- For slopes up to 12% use SL 2™ Slope Grade. For slopes over 12% use NP 2™ sealant (see Form No. 1017911).
- Use only Sonolastic® color packs intended for use with SL 2™.
- Make certain the most current version of this data guide is being used; call Customer Service (1-800-433-9517) to verify the most current version.
- Proper application is the responsibility of the user. Field visits by ChemRex® personnel are for the purpose of making technical recommendations only and are not for supervising or providing quality control on the job site.
Technical Data

Compliances
- Federal Specification TT-S-00227E, Type I, Class A
- Corps of Engineers CRD-C-506, Type I, Class A
- ASTM C 920, Type M, Grade P, Class 25, Use T and M
- Canadian Specification CAN/CSGB 19.24-M90, Classification MCG-1-40-B-L, No. 81031
- Canadian approval for use in establishments that handle food
- USDA compliant for use in areas that handle meat and poultry

Typical Properties of Cured Sealant

<table>
<thead>
<tr>
<th>Property</th>
<th>SL 2 Value</th>
<th>SL 2 Slope Grade Value</th>
<th>Test Method</th>
</tr>
</thead>
<tbody>
<tr>
<td>Movement capability, %</td>
<td>± 25</td>
<td>± 25</td>
<td>ASTM C 719</td>
</tr>
<tr>
<td>Tensile strength, psi (MPa)</td>
<td>175 (0.9)</td>
<td>145 (1.0)</td>
<td>ASTM D 412</td>
</tr>
<tr>
<td>Elongation, %</td>
<td>24%</td>
<td>22%</td>
<td>ASTM D 412</td>
</tr>
<tr>
<td>Shrinkage</td>
<td>Nil</td>
<td>Nil</td>
<td></td>
</tr>
<tr>
<td>Low temperature flexibility, -15°F (-26°C)</td>
<td>Passes</td>
<td>Passes</td>
<td>ASTM C 793</td>
</tr>
<tr>
<td>Service temperature range, -40 to 180°F (-40 to 82°C)</td>
<td>Passes</td>
<td>Passes</td>
<td></td>
</tr>
<tr>
<td>Stain and color change</td>
<td>None</td>
<td>None</td>
<td></td>
</tr>
<tr>
<td>Extrusion rate and application life</td>
<td>Passes</td>
<td>Passes</td>
<td>ASTM C 605</td>
</tr>
<tr>
<td>Rheological flow at 40°F (4 °C)</td>
<td>Self-leveling</td>
<td>–</td>
<td>ASTM C 639</td>
</tr>
<tr>
<td>Hardness at standard conditions, Shore A</td>
<td>50</td>
<td>50</td>
<td>ASTM C 661</td>
</tr>
<tr>
<td>Hardness after heat aging (Maximum Shore A 50I)</td>
<td>40</td>
<td>20</td>
<td>ASTM C 661</td>
</tr>
<tr>
<td>Tack-free time, hours, (Maximum 72 hours)</td>
<td>&lt;24</td>
<td>&lt;24</td>
<td>ASTM C 679</td>
</tr>
<tr>
<td>Bond durability on concrete ±25% movement</td>
<td>Passes*</td>
<td>Passes*</td>
<td>ASTM C 719</td>
</tr>
<tr>
<td>Weight loss after heat aging, %</td>
<td>5</td>
<td>5</td>
<td>ASTM C 792</td>
</tr>
<tr>
<td>Cracking &amp; chalking after heat aging</td>
<td>None</td>
<td>None</td>
<td>ASTM C 792</td>
</tr>
<tr>
<td>Artificial weathering</td>
<td>Passes*</td>
<td>Passes*</td>
<td>ASTM C 793</td>
</tr>
<tr>
<td>Xenon arc, 250 hours</td>
<td>Passes*</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Artificial weathering</td>
<td>No surface cracking</td>
<td>No surface cracking</td>
<td>ASTM C 26</td>
</tr>
<tr>
<td>Adhesion in peel, on concrete</td>
<td>Passes*</td>
<td>Passes*</td>
<td>ASTM C 794</td>
</tr>
</tbody>
</table>

Test results are averages obtained under laboratory conditions. Reasonable variations can be expected.

Order Information

Packaging
- SL 2™
  - 1.5 gallon units (5.7 L) containing Part A and Part B
  - 3 gallon units (11.34 L) containing Part A and Part B
  - For slope grade SL 2™ Fast-Cure see Form No. 1017994.

Primer 733
- 1 pint (473 mL) cans, 12 pints per carton

Coverage rate of primer is approximately 450 linear feet (137 m) per pint for a 1/2" (13 mm) deep joint.

Shelf life of both products is 12 months when stored in unopened containers under normal conditions.

Colors
- 40 standard, stocked colors are available. Refer to the Rainbow of Colors® popular palette, Form No. 1017994.
- 463 standard (nonstocked) colors are also available, and custom matching can be done upon request. Refer to the Rainbow of Colors® book.
- Available in pretinted colors: Precast gray, Limestone
- 1.5 gallon (5.7 L) units
- 4.5 gallon (17 L) units

Minimum order is 100 pails in 4.5 gallon units.

Coverage

<table>
<thead>
<tr>
<th>Joint Depth (inches)</th>
<th>Linear Feet per Gallon Joint Width (inches)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1/4&quot;</td>
</tr>
<tr>
<td>1/4&quot;</td>
<td>508</td>
</tr>
<tr>
<td>3/8&quot;</td>
<td>82</td>
</tr>
<tr>
<td>1/2&quot;</td>
<td>51</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Joint Depth (mm)</th>
<th>Linear Meters per Liter Joint Width (mm)</th>
</tr>
</thead>
<tbody>
<tr>
<td>6</td>
<td>10</td>
</tr>
<tr>
<td>8</td>
<td>24.8</td>
</tr>
<tr>
<td>10</td>
<td>6.6</td>
</tr>
<tr>
<td>12</td>
<td>4.1</td>
</tr>
</tbody>
</table>
Warning

SL 2™ Part A contains calcium carbonate, toluene disocyanate, silicon dioxide, titanium dioxide, mineral spirits (Stoddard type)

Risks
Combustible liquid and vapor. May cause skin and eye irritation. Inhalation of vapors may cause irritation and intoxication with headaches, dizziness and nausea. May cause dermatitis and allergic responses. Potential skin and/or respiratory sensitizer. Ingestion may cause irritation. Reports associate repeated or prolonged occupational overexposure to solvents with permanent brain, nervous system, liver and kidney damage. INTENTIONAL MISUSE BY DELIBERATELY INHALING THE CONTENTS MAY BE HARMFUL OR FATAL.

Precautions
KEEP OUT OF THE REACH OF CHILDREN. KEEP AWAY FROM HEAT, FLAME AND SOURCES OF IGNITION. Keep container closed when not in use. Prevent contact with skin, eyes and clothing. Wash thoroughly after handling. DO NOT take internally. Use only with adequate ventilation. Use impervious gloves, eye protection and if the TVL is exceeded or used in a poorly ventilated area, use NIOSH/MSHA approved respiratory protection in accordance with applicable federal, state and local regulations. All label warnings must be observed until container is commercially cleaned or reconditioned.

First Aid
In case of eye contact, flush thoroughly with water for at least 15 minutes. SEEK IMMEDIATE MEDICAL ATTENTION. In case of skin contact, wash affected areas with soap and water. If irritation persists, SEEK MEDICAL ATTENTION. Remove and wash contaminated clothing. If irritation causes physical discomfort, remove to fresh air. If discomfort persists or any breathing difficulty occurs, or if swallowed, SEEK IMMEDIATE MEDICAL ATTENTION.

Refer to Material Safety Data Sheet (MSDS) for further information.

Proposition 65
This product contains material listed by the state of California as known to cause cancer, birth defects or other reproductive harm.

VOC Content
When mixed, product contains less than 6.4 - 95 g/L or 0.54 - 0.77 lbs/gal less water and exempt solvents.

Warning
SL 2™ Part B contains toluene disocyanate mix

Risks
May cause eye, skin or respiratory irritation. May cause dermatitis and allergic reactions. Potential skin and/or respiratory sensitizer.

Precautions
KEEP OUT OF THE REACH OF CHILDREN. Prevent contact with skin, eyes or clothing. Wash thoroughly after handling. DO NOT take internally. Ingestion may cause irritation. Use adequate ventilation. Keep container closed. Inhalation may cause irritation. Use impervious gloves, eye protection and if the TVL is exceeded or used in a poorly ventilated area, use NIOSH/MSHA approved respiratory protection in accordance with applicable federal, state and local regulations. All label warnings must be observed until container is commercially cleaned or reconditioned.

First Aid
In case of eye contact, flush thoroughly with water for at least 15 minutes. SEEK IMMEDIATE MEDICAL ATTENTION. In case of skin contact, wash affected areas with soap and water. If irritation persists, SEEK MEDICAL ATTENTION. Remove and wash contaminated clothing. If irritation causes physical discomfort, remove to fresh air. If discomfort persists or any breathing difficulty occurs, SEEK IMMEDIATE MEDICAL ATTENTION. Refer to Material Safety Data Sheet (MSDS) for further information.

Proposition 65
This product contains materials listed by the state of California as known to cause cancer, birth defects, or other reproductive harm.

VOC Content
8.09 g/L or 0.07 lbs/gal less water and exempt solvents.

Caution
SL 2™ Accelerator contains mineral oil, 2-ethylhexanoic acid

Risks
May cause skin, eye or respiratory irritation. May be absorbed through skin. May cause dermatitis and allergic reactions. Ingestion may cause irritation. Repeated or prolonged absorption may affect the kidneys.

Precautions
KEEP OUT OF THE REACH OF CHILDREN. Prevent contact with skin, eyes and clothing. Wash thoroughly after handling. DO NOT take internally. Use only with adequate ventilation. Inhalation may cause irritation. Keep container closed. Use impervious gloves, eye protection and if the TVL is exceeded or used in a poorly ventilated area, use NIOSH/MSHA approved respiratory protection in accordance with applicable federal, state and local regulations.

First Aid
In case of eye contact, flush thoroughly with water for at least 15 minutes. SEEK IMMEDIATE MEDICAL ATTENTION. In case of skin contact, wash affected areas with soap and water. If irritation persists, SEEK MEDICAL ATTENTION. Remove and wash contaminated clothing. If irritation causes physical discomfort, remove to fresh air. If discomfort persists or any breathing difficulty occurs, SEEK IMMEDIATE MEDICAL ATTENTION. Refer to Material Safety Data Sheet (MSDS) for further information.

Proposition 65
This product does not knowingly contain materials which are known to the state of California to cause cancer, birth defects, or other reproductive harm.

VOC Content
0 g/L or 0.07 lbs per gallon less water and exempt solvents.

For medical emergencies only, call ChemTrec (1/800/424-9300)