

Sonneborn®

Sealant Systems



SONOLASTIC® SONOMERIC® 1

Self-leveling polyurethane sealant for chemical and industrial environments

Features

- Weather resistant...
- Jet-fuel resistant...
- Exceptional elongation...
- No mixing...
- No priming on most applications...

Benefits

- Long-term performance
- Withstands chemical attack
- Tolerates joint movement
- Use directly from container
- Easy to apply

Where to Use Sonomeric® 1

- Concrete
- Airport runways
- Highways and bridges
- Industrial floors
- Driveways and loading docks
- Stadiums

How to Apply Sonomeric® 1

Joint Preparation

- 1** The number of joints and the joint width should be designed for a maximum of $\pm 25\%$ 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).
- 3** In deep joints, the sealant depth must be controlled by Closed-Cell Backer-Rod or Soft Backer-Rod. (Refer to Form Nos. 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 $1/8"$ (3 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. The sealant does not adhere to it, and no separate bondbreaker is required. Do not prime or puncture the backer-rod.

Surface Preparation

- 1** Joint faces must be structurally sound, fully cured, clean, dry, and free of all loose aggregate, paint, oil, grease, wax, mastic compounds, waterproofing compounds, and form release agents, and other contamination.
- 2** **New concrete:** Remove all loose material by wire brushing.

Sandblast surfaces that have been in contact with form release agents. Fresh concrete must be fully cured at least 28 days. Laitance must be removed by abrading.

3 **Old concrete previously caulked:** Remove all old joint sealing material by mechanical means. If joint sides have absorbed oils, sufficient concrete must be cut away to ensure clean surface.

Priming

- 1** Prime steel in contact with Sonomeric® 1 with Primer 733 after cleaning to bright metal.
- 2** Where water immersion may occur, prime with Primer 733 (refer to Form No. 1017962).
- 3** Apply primer in a thin, uniform film; avoid buildup of excess primer.

4 Allow approximately 15 minutes to 20 minutes drying time before applying sealant.

Application

- 1** Sonomeric® 1 can be poured from a can or applied by gun. Fill joint from bottom to prevent formation of air voids.
- 2** Avoid application at extremely low temperatures to prevent moisture condensation and excessive thickening of the sealant.

Clean Up

Immediately after use, wash tools with xylene or Reducer 990.

For Best Performance

- Protect Sonomeric® 1 from traffic until fully cured.
 - Do not use on surfaces having a high crown or marked degree of slope.
 - Do not paint Sonomeric® 1.
 - Do not apply over asphalt dampproofing or asphalt-impregnated joint fillers.
 - Do not allow Sonomeric® 1 to come into contact with uncured silicone sealants.
 - When subject to periodic water immersion, prime joints with Primer 733.
 - Do not apply sealant if bed beneath deck or substrate has become saturated with water.
 - Do not allow Sonomeric® 1 to come into contact with alcohol-based material or solvents.
 - When used on steel, surfaces must be cleaned to bright metal and primed with primer 733.
 - 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 jobsite.

Technical Data

Compliances

- ASTM C 920, Type S, Grade P, Use T, M, Class 25
- Federal Specification TT-S-00230C, Type I, Class A
- Corps of Engineers CRD-C-541, Type I, Class A

Typical Properties

| Property | Value | Test Method |
|--------------------------------------|------------------------|-------------|
| Shore A hardness | 28 | ASTM C 661 |
| 100% modulus, psi (MPa) | 39 (0.24) | ASTM D 412 |
| Ultimate tensile strength, psi (MPa) | 240 (1.7) | ASTM D 412 |
| Ultimate elongation, % | 1,200 | ASTM D 412 |
| Viscosity (poise) | 200 | Brookfield |
| Service temperature range °F (°C) | -40 to 180 (-40 to 82) | |

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

Order Information

Packaging

Sonomer[®] 1

- 5 gallon pails (18.93 L); approximate weight: 50 lbs. (22.5 kg)

Shelf life is 6 months when stored in unopened containers under normal conditions. Storing at elevated temperatures will reduce shelf life.

Color

- Black

Coverage

| Joint Depth | Linear Feet per Gallon | | | | | | |
|-------------|------------------------|------|------|------|------|------|----|
| | Joint Width | | | | | | |
| | 1/4" | 3/8" | 1/2" | 5/8" | 3/4" | 7/8" | 1" |
| 1/4" | 308 | 205 | 154 | 122 | | | |
| 3/8" | | | | 82 | 68 | 58 | 51 |
| 1/2" | | | | | 51 | 44 | 38 |

| Joint Depth (mm) | Linear Meters per Liter | | | | | | |
|------------------|-------------------------|-------|-------|------|------|------|------|
| | Joint Width | | | | | | |
| | 6 | 10 | 13 | 16 | 19 | 22 | 25 |
| 6 | 24.77 | 16.49 | 12.39 | 9.81 | | | |
| 10 | | | | 6.59 | 5.47 | 4.66 | 4.10 |
| 13 | | | | | 4.10 | 3.54 | 3.06 |

Warning

Sonomer[®] 1 contains calcium oxide, talc, light aromatic naphtha, trimethyl benzene, mineral spirits, asphalt, toluene diisocyanate, silicon dioxide

Risks

Combustible liquid and vapor. May cause skin and eye irritation. May cause dermatitis and allergic responses. Potential skin and/or respiratory sensitizer. Inhalation of vapors may cause irritation and intoxication with headaches, dizziness and nausea. 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. Use only with adequate ventilation. Keep container closed. Prevent contact with skin, eyes and clothing. Wash thoroughly after handling. Avoid breathing vapors. Use impervious gloves, goggles and if the TLV is exceeded or if used in a poorly ventilated area, use NIOSH/MSHA approved respiratory protection in accordance with applicable federal, state and local regulations. DO NOT cut or weld on or near empty container. Empty container may

contain explosive vapors or hazardous residues. 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. If inhalation causes physical discomfort, remove to fresh air. If discomfort persists or any breathing difficulty occurs or if swallowed, SEEK IMMEDIATE MEDICAL ATTENTION. If vomiting occurs, keep the victim's head below hips to avoid aspiration

of vomitus into victim's lungs.

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

This product contains 128 g/L or 1.07 lbs. per gallon less water and exempt solvents.

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

Limited Warranty Notice

Every reasonable effort is made to apply ChemRex[®] exacting standards both in the manufacture of our products and in the information which we issue concerning these products and their use. We warrant our products to be of good quality and will replace or, at our election, refund the purchase price of any products proved defective. Satisfactory results depend not only upon quality products, but also upon many factors beyond our control. Therefore, except for such replacement or refund, CHEMREX[®] MAKES NO WARRANTY OR GUARANTEE, EXPRESS OR IMPLIED, INCLUDING WARRANTIES OF FITNESS FOR A PARTICULAR PURPOSE OR MERCHANTABILITY, RESPECTING ITS PRODUCTS, and CHEMREX[®] shall have no other liability with respect thereto. Any claim regarding product defect must be received in writing within one (1) year from the date of shipment. No claim will be considered without such written notice or after the specified time interval. User shall determine the suitability of the products for the intended use and assume all risks and liability in connection therewith. Any authorized change in the printed recommendations concerning the use of our products must bear the signature of the ChemRex[®] Technical Manager.



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