

SELF-LEVELING SEALANT

Hybrid Silane Polyether



PRODUCT DATASHEET

DESCRIPTION: Rapid Set® SELF-LEVELING SEALANT is a single-component, fast curing, self-leveling, UV stable sealant that is a long lasting and easy to apply. Its hybrid silane polyether chemistry enhances both adhesive and cohesive bond, prevents shrinkage upon cure, provides high tensile strength and flexibility, exceptional durability, and weather resistance. Rapid Set® SELF-LEVELING SEALANT promotes superior adhesion that out performs the bond strength of polyurethanes, and will not foam on damp surfaces. This environmentally friendly formulation has a low VOC content, is 100% solvent free, and contains no isocyanates.

USES: Use SELF-LEVELING SEALANT for a wide variety of interior and exterior horizontal sealant applications, including: control joints, expansion joints and crack filling; sealing around pools and fountains. Honor joints; do not paint or coat. It is engineered for use on exterior balconies, concrete floor slabs, driveways, garages, patios, walkways and other applications. This material provides excellent adhesion to concrete, block, brick, stone, masonry, aged asphalt, wood, aluminum, galvanized metal, steel, and glass. It can be used in damp, dry or cold climates, and its excellent adhesion characteristics make it ideal for application to damp concrete substrates.

ENVIRONMENTAL ADVANTAGES: Low VOC, 100% solids, isocyanate-free products are ideal for applications where the presence of VOCs, fumes or vapors are unacceptable, undesirable or impractical. These products reduce the health risks of building occupants, installers and contractors; and contribute to improved indoor and outdoor air quality. Maximum durability and service life minimizes construction waste byproducts.

REGULATORY COMPLIANCE: Conforms to OTC rule for sealants. Meets requirements of California Regulations: CARB and SCAQMD. Conforms to USDA Requirements for non-food contact.

GREEN STANDARDS: LEED 2.2 for new construction and major renovations: Low emitting materials (section 4.1) 1 Point. National Association of Home Builders (NAHB) Model Green Home Building Guidelines: 5 global impact points, VOC Content: Less than 19 grams / liter per ASTM D2369. EPA Method 24 (tested at 240°F/115°C).

SURFACE PREPARATION: Ensure substrate is clean, sound, and free of bond inhibitors, such as grease, oil, mold, surface water, coatings and sealers. For best results, roughen surfaces with an abrasive disc or sand paper, then wipe with acetone. Tape off or protect adjacent areas.

APPLICATION: Always maintain a width to depth ratio of 2:1. Apply between a minimum temperature of 35°F (2°C) and rising, and a maximum of 100°F (38°C). For best results, place sealants between 70°F (21°C) and 80°F (27°C). For 10.1 oz. (299mL) cartridge, cut the end of the nozzle to match the width of the joint and insert a tool to puncture the inner foil seal at the base of the nozzle. Ensure the opening size of the nozzle and foil seal are large enough to allow proper flow. Too small an opening could result in excessive back pressure leading to failure of the rear seal. For 28 oz. (828mL) unscrew to remove the nozzle. Use a sharp knife to cut the tapered portion of the nub leaving the threaded portion intact. Screw the nozzle back onto the remaining nub threads. Cut the end of the nozzle to match the width of the joint. Ensure the opening size of the nozzle and cut nub are large enough to allow proper flow. Too small an opening could result in excessive back pressure, leading to failure of the rear seal. For both sizes, insert the cartridge into a caulking gun. Before placing, extrude material until an even color (without streaks) flows out of the nozzle. Place nozzle at bottom of joint or application area to avoid trapping air during placement. Keep the nozzle in the material during application. Using constant pressure, carefully apply the sealant with a smooth continuous bead. If tooling is needed, do so within 15 minutes of application. Masking and tooling may be desired at low temperature applications.

CRACK/JOINT FILLING: Place backer rod, where required, to prevent three-sided bonding. Concrete joints (tooled or saw cut) must be free of contaminants and the concrete must have at least 72 hours of cure before placement.

OVERVIEW

Highlights:

Fast Curing: 15 minute working time, tack-free in 30 minutes

Adheres to dry or damp substrates

Interior/Exterior: Durable in tough environments

Non-foaming, no bubbling

Weather and UV resistant. Non-shrink

Pro-performance joint and crack sealant

Long lasting and easy to apply

100% solids, low VOC, no odor, and no harmful isocyanates

Conforms to:

ASTM C920, Type S, Grade P, Class 25, uses T2, M, and O

Federal Specification TT-S-00230-C, Type 1, Class B

Army Corps of Engineers CRD-C-541, Type 1, Class B

Canadian Standards Board CAN 19, 13-M82

MasterFormat® 2016

07 01 90 Joint Sealant Rehabilitation/Replacement

07 92 13 Elastomeric Joint Sealants

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CLEAN-UP: Remove excess material using acetone and disposable paper towels or cloth rags before it cures on placement tools and adjacent surface. Dispose of waste material in compliance with local regulations.

CURING: Tack-free in 30 minutes at 1/4" at 70°F (21°C), 50% relative humidity.

COLD WEATHER: Installation in low temperatures will extend cure times of the sealant. To ease flow and placement in cold conditions, warm and keep the adhesive at 70°F (21°C) 24 hours prior to installation. Remove dew, frost or ice from the substrate with acetone on a clean cloth and place adhesive immediately.

WARM WEATHER: Installation in warm temperatures 80°F to 100°F (27°C to 38°C) will not adversely affect adhesive performance. Warmer temperatures will decrease viscosity and shorten cure time.

PACKAGING: Available in single-component, 10.1 fl. oz. (299 mL) and 28 fl. oz. (828 mL) cartridges.

COLORS: Light Gray, Gray, and Sandstone.

COVERAGE: 10.1 fl. oz. (299 mL) yields 18.2 in³; 28 fl. oz. (828 mL) yields 50.5 in³

10.1 FLUID OUNCE (299 ML) COVERAGE RATE		
Depth of Joint	Width of Joint	Linear Distance Per Cartridge
1/8" (3 mm)	1/8" (3 mm)	96' (29 m)
1/8" (3 mm)	1/4" (6 mm)	48' (15 m)
1/4" (6 mm)	1/4" (6 mm)	24' (7 m)
1/4" (6 mm)	1/2" (13 mm)	12' (4 m)

28 FLUID OUNCE (828 ML) COVERAGE RATE		
Depth of Joint	Width of Joint	Linear Distance Per Cartridge
1/8" (3 mm)	1/8" (3 mm)	270' (82 m)
1/8" (3 mm)	1/4" (6 mm)	135' (41 m)
1/4" (6 mm)	1/4" (6 mm)	68' (21 m)
1/4" (6 mm)	1/2" (13 mm)	34' (10 m)

Sealants used in horizontal joints designed for vehicular traffic areas must be placed at a maximum width of 1" by 1/2" (25 mm x 13 mm) depth. Closed cell backer rod or bond tape is recommended to prevent three-sided bonding.

SHELF LIFE: Rapid Set® SELF-LEVELING SEALANT has a shelf life of 18 months from the date of manufacture when properly stored.

STORAGE: Store in original, unopened container in a cool, dry, area. Protect unopened container from water, heat and direct sunlight. Store at 40°F to 90°F (4°C to 32°C). Elevated temperatures will reduce shelf life.

LIMITATIONS: Do not apply greater than 1" width and 1/2" depth. Do not use in continuous immersion applications. Allow treated wood and asphalt to cure for six (6) months prior to application of SELF-LEVELING SEALANT. Do not apply on frozen substrates. Test and evaluate all paints and coatings prior to application to SELF-LEVELING SEALANT. Polyurethane and oil based paints may dry slowly.

USER RESPONSIBILITY: Before using, read current technical data sheets, bulletins, product labels and safety data sheets. It is the user's responsibility to review the instructions and warnings for any CTS products prior to use.

WARNING: AVOID CONTACT WITH SKIN AND EYES. Can cause skin irritation, may cause an allergic skin reaction, causes serious eye irritation. Wear protective gloves, protective clothing, and eye protection. In case of contact with eyes rinse immediately with plenty of water and seek medical advice.

Refer to the Safety Data Sheet and www.CTScement.com for additional safety information regarding this material.

LIMITED WARRANTY: CTS Cement Manufacturing Corp. (CTS) warrants its materials to be of good quality and at its option, within 18 months from date of manufacture, will replace material proven defective or refund purchase price thereof, and such replacement or refund shall be the limit of CTS's responsibility. Except for the foregoing, all warranties, expressed or implied, including merchantability and fitness for a particular purpose, are excluded. CTS shall not be liable for any consequential, incidental, or special damages arising directly or indirectly from the use of the materials.

⚠ WARNING
CANCER and REPRODUCTIVE HARM - www.P65Warnings.ca.gov

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TYPICAL PHYSICAL DATA

7 Days at 70°F (23°C)

Colors	Light Gray, Gray, and Sandstone
Stain and Color Change, ASTM C510	No change
Hardness, Shore A, ASTM C661	15
Tack Free Time, ASTM C679	< 30 minutes
Joint Movement, ASTM C719	+/- 25%
Tensile Strength, ASTM D412	120 psi (0.83 MPa)
Tensile Elongation %, ASTM D412	350%
Volatile Organic Content, ASTM D2369	<16 g/l
Shrinkage	None visible after 14 days
Viscosity	30,000 cp +/- 15,000 cp, Brookfield RVF TF Spindle, 4 RPM, 73°F (23°C)
Service Temperature	-40°F To 200°F (-40°C to 93°C)

Note: ASTM Standards are current unless otherwise stated.

VOC Compliance (Volatile Organic Compound)

Meets U.S. EPA 40 CFR 59 Subpart C & D; CARB: California Air Resource Board; LADCO: Lake Michigan Air Directors Consortium (Illinois, Indiana, Michigan, Wisconsin); MRPO: Midwest Regional Planning Organization (Illinois, Indiana, Michigan, Ohio, Wisconsin); SCAQMD: South Coast Air Quality Management District (Los Angeles, Orange, Riverside, San Bernardino Counties); and CEPA/EC: Canada Environmental Protection Agency/Environment.



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