

DURASIL®

High-Performance, Self-Leveling Silicone Sealant

PRODUCT DATA SHEET PD1211- REV.230912



APPLICATIONS



ROOFING



MULTI-PURPOSE

SEALANT

PART NUMBERS & PACKAGING:

- F1211 — 10.1 fl. oz. (300 ml) cartridge - 24/carton
- F1207 — 20 fl. oz. (591 ml) sausage - 12/carton
- F1217 — 5 gallon pail - special order only

DESCRIPTION:

DURASIL is a neutral cure (RTV) silicone, adhesive sealant, designed for application on dissimilar materials such as glass, aluminum, steel, copper, masonry and many engineering plastics such as polycarbonate, vinyl (PVC), fiberglass (FRP), asphalt shingles, tile, and acrylic. **DURASIL** is also well suited for difficult to bond surfaces such as Kynar 500® PVDF and Tedlar® PVF.

DURASIL's low odor, non corrosive, and neutral cure chemistry will not damage unprotected metals. **DURASIL** is highly elastic and low modulus with mechanical properties capable of low temperature flexibility and 50% joint movement. **DURASIL** is recommended for metal architecture, windows and doors, curtain wall construction, and glass block.

DURASIL develops properties rapidly and is effective in many industrial applications where strength, elasticity, adhesion, and speed of set are required.

COLORS:

DURASIL SL is available in white, gray, black & translucent. Color matching is available in batch quantity only

REGULATORY COMPLIANCE:

- Conforms to OTC Rule for Sealants
- Meets requirements of California Regs: CARB, BAAQMD and SCAQMD
- This product does not contain cancer causing chemicals listed in California Proposition 65
- Conforms to USDA Requirements for Non-food Contact

ADVANTAGES:

- Neutral-cure — will not promote corrosion of metal
- Bonds to Kynar 500® PVDF coated metal
- Solvent-free, 100% solids will not shrink
- Non-slump, applies vertically and overhead
- 10-minute skin over
- UV stable, will not "suntan"
- ± 50% joint movement
- Made in the USA - ISO 9001:2015 certified processes

BASIC USES:

- Window and door frames
- Metal Flashing
- Roofing
- Curtain Walls
- Expansion joints
- Siding
- Weather Sealing
- Cove Joints
- Parapets
- Transportation

COMPATIBLE SUBSTRATES:

- Kynar 500® PVDF Coated Metal
- Galvanized Metal
- Aluminum
- Copper
- Stainless Steel
- Tedlar® PVF
- Glass
- EPS Foam
- Engineered Plastics, PVC
- Fiberglass FRP
- Asphalt shingles

**Test and evaluate to ensure adequate adhesion.*

GREEN STANDARDS:

- VOC Content: less than 32 grams / liter ASTM D2369 EPA Method 24 (tested at 240°F / 115°C)
- EQc2: BPDO – Low emitting Materials: Chemlink adhesives and sealants are low-VOC products when exterior applied.



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APPLICABLE PERFORMANCE STANDARDS:

- ASTM C920, Type S, Grade NS, Class 50, Uses NT, T2, M, G, A & O
- Federal Specification TT-S-00230-C Type II, Class A
- Corps of Engineers CRD-C-541, Type II, Class A
- Canadian Standards Board CAN 19, 13-M82

JOINT PREPARATION:

Joint surfaces should be clean, dry and free from all contamination including: dirt, oils, grease, tar, wax, rust and any other substance that may inhibit the sealant's performance.

JOINT DESIGN:

Install all joint applications per ASTM and SWRI recommendations and guidelines. Joints shall be designed with a depth to width ratio of 1:2 (joint depth one-half the width). Control the depth of the sealant by using a polyethylene backer rod that is 25% larger than the joint opening at standard temperature. To prevent three-point adhesion use a backer rod or bond breaker tape to ensure proper joint movement and a long lasting weatherproof seal. Where the joint configuration will not permit a backer rod, CHEM LINK recommends that an alternative bond breaker be used.

JOINT WIDTH INCHES (MM)	JOINT DEPTH INCHES (MM)
1/4 - 1/2 (6-13)	1/4 (6)
1/2 - 3/4 (13-19)	1/4 - 3/8 (6-10)
3/4 - 1 (19-25)	3/8 - 1/2 (10-13)
1 - 2 (25-50)	1/2 (13)

CHEM LINK recommends an appropriate substrate primer to be used on high moving joints or dissimilar substrates which require increased adhesion properties

APPLICATION GUIDELINES:

GLASS:

Prior to application remove any residual contamination by mechanical abrasion, sand blasting or power washing. Remove all release agents and old caulk. Dry all visible and standing water prior to applying **DURASIL**.

METAL:

Prepare all metal to ensure maximum adhesion. Remove all rust, scale and residue by wire brushing to a bright metal sheen. Remove films, loose or inappropriate coatings and oils with an appropriate solvent such as alcohol.*

**CHEM LINK recommends that coated substrates be tested for adhesion prior to starting a project. Please contact Technical Services for specific application guidelines and recommendations.*

WOOD:

Wood should be clean, sound and dry prior to sealant application. Allow treated wood to weather for six months prior to application. Remove all coatings and paint (or test for compatibility) to ensure proper bonding. Do not use on fire retardant lumber.

PRIMING:

In most instances **DURASIL** will not require a primer. However, certain applications or substrates may require a primer to ensure a long lasting bond and weatherproof seal. It is the applicator's responsibility to determine the need for a primer. CHEM LINK recommends a primer be used for any application where prolonged immersion is anticipated.

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White

Trans-
lucent

Black

Gray

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APPLICATION INSTRUCTIONS:

Remove all dirt, oil, loose paint, frost and other contamination from all working surfaces with alcohol DO NOT USE petroleum solvents such as mineral spirits or xylene. Maintain **DURASIL** at room temperature before applying to ensure easy gunning and tooling. Test and evaluate to ensure adequate adhesion. Carefully gun the sealant with a smooth, continuous bead. If tooling is needed, do so within fifteen minutes of application.

CLEAN-UP:

Wet sealant can be removed using a solvent such as alcohol. Cured **DURASIL** can be removed by abrading or scraping the substrate.

STORAGE & HANDLING:

Store original, unopened containers in a cool, dry area. Protect unopened containers from water, heat and direct sunlight. Elevated temperatures will reduce shelf life. **DURASIL** will not freeze.

SHELF LIFE:

Twelve months from date of manufacture when stored at 70°F / 21°C with 50% relative humidity. High temperature and high relative humidity may significantly reduce shelf life. Pails have a shelf life of six months.

CAUTION:

Avoid prolonged contact with skin. Uncured sealant irritates eyes. In case of contact with eyes immediately flush with water. Call a physician. Please refer to the SDS for first aid information. See www.chemlink.com for most current SDS. KEEP OUT OF REACH OF CHILDREN.

LIMITATIONS:

- In areas where prolonged chemical exposure is anticipated, contact Technical Services for recommendations.
- Allow treated wood to "cure" for six months prior to application per APA guidelines.
- Do not use in areas subject to continuous immersion.
- Do not store in elevated temperatures.
- Remove all coatings and sealers before application.
- While **DURASIL** can be applied in temperatures as low as 15°F (-9°C), please contact customer service for application guidelines with temperatures below 32°F (0°C).
- Do not use on surfaces to be painted.
- Do not use on TPO without CHEM LINK TPO primer.
- Do not use on tub and tile applications.

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TECHNICAL INFORMATION & TESTING:

TYPICAL PHYSICAL PROPERTIES/DATA TESTING

PROPERTY	VALUE	TEST METHOD
Rheological Properties	Type II—Single-component non-sag	ASTM C639
Density	8.4 ± 0.2 lbs per gallon	ASTM D1475
Tack Free Time	10 min ± 5 min	45 ± 5 % R.H.
Elongation at Break	575 ± 50%	ASTM D412
Hardness Shore A	10 ± 3	ASTM C661
Tensile Strength	120 ± 20 psi	ASTM D412
Shear Strength	100 ± 20 psi	ASTM D1002
Low Temperature Flex	Pass -15°F (-26°C) 1/4 inch mandrel	ASTM D522
Shrinkage	No visible shrinkage after 14 days	
Service Temperature	-80°F to 400°F (-62°C to 204°C)	

All properties described in this document are derived from testing conducted in laboratory conditions. Properties and performance will vary depending on environmental conditions and application technique. Test and evaluate to determine appropriate usage. Visit www.chemlink.com for the Safety Data Sheet, Technical Data Guides, Cold Weather Application Guidelines and full warranty for this product.