

Technical Data Guide

Polyether Technology

CSI Section No. 07 92 13

CHEM LINK Products, LLC

Telephone: 800-826-1681

Fax: 269-679-4448

353 East Lyon Street

Schoolcraft, MI 49087

www.chemlink.com

Last Revision: 09/07/12

Document No. L1260

Product Description

DuraLink is an extremely elastic moisture curing sealant designed for use in metal architecture, curtain wall construction and joints subject to movement. **DuraLink's** adhesion to difficult surfaces permits its use on anodized metal and coatings such as Kynar 500[®] PVDF. **DuraLink** will not stain absorbent stone substrates like limestone or marble. **DuraLink's** unique polyether chemistry eliminates out-gassing on green concrete and protects against "sun tanning" or discoloration when exposed to ultraviolet light.

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
- SWR Institute Validated (Sealant Waterproofing and Restoration)
- AAMA 802.3-08 Type II, AAMA 803.3-08 Type I, and AAMA 805.2-08 Group C

Regulatory Compliance

- Conforms to OTC Rule for Sealants
- Meets requirements of California Regs: CARB, BAAQMD and SCAQMD
- Conforms to California Proposition 65
- 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
- NAHB Model Green Home Building Guidelines: 5 Global Impact Points
- VOC Content: less than 19 grams / liter ASTM D2369 EPA Method 24 (tested at 240°F / 115°C)



Advantages

- Bonds to Kynar 500[®] PVDF coated metal
- Solvent free, 100% solids will not shrink
- Non-slump, applies vertically and overhead
- 30 minute skin over
- No outgassing on damp surfaces
- Color stability, will not suntan
- Paintable within 24 hours (See limitations)
- +/- 50% joint movement

Colors

Medium Bronze	Dark Bronze	Black
Forest Green	Stone	Gray
Terra Cotta	Aluminum	Limestone
Tan	Almond	White

* Color matching is available in batch quantity only

Packaging

- **10.1 oz (300 ml)**
24 cartridges/carton, 45 cartons/pallet
- **20 oz (600 ml)**
12 sausages/carton, 40 cartons/pallet
- **2 and 5 gallon pails or 50 gallon drums**
available by special order

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)

Compatible Substrates*	Basic Uses
Kynar 500® PVDF Coated Metal	Window and door frames
Galvanized Metal	Pre-cast concrete
Aluminum	Block and Masonry
Engineered Plastics, PVC	Curtain Walls
Glass	Expansion joints
Fiberglass FRP	Siding
EPS Foam	Parapets
EPDM and SBS Mod Bit	Cove Joints
Brick	Transportation
Concrete and Stone	Weather Sealing

**Test and evaluate to ensure adequate adhesion.*

Typical Uncured Properties

Viscosity	900,000 - 1,200,00 cP at 72°F (22°C)	Brookfield RVF TF Spindle, 4 RPM, 73°F (23°C)
Density	11.0 pounds per gallon	ASTM D1475
VOC Content	19 grams/liter	ASTM D2369
Tack Free Time	45 minutes at 50% RH, 72°F (22°C)	ASTM C679
Skin Time	35-60 minutes	Industrial Method
Odor	Mild Mint Smell	Industrial Method

Typical Cured Properties

Elongation at Break	750-800%	ASTM D412
Peel Strength	25 - 30 psi	ASTM C794
Tensile Strength	250 - 300 psi	ASTM D412
Hardness Shore A	17 - 23	ASTM C661
Lap Shear Strength	150 - 175 psi	ASTM D1002
Low temp. flex	Pass -10°F (-23°C) 1/4 inch mandrel	ASTM D816
Shrinkage	No visible shrinkage after 14 days	
Service Temperature	-40°F to 200°F (-40°C to 93°C)	
Weathering	No cracking or chalking, slight matte finish after 2000 hours QUV "A" bulb. Durometer gain of 5 points	

Application Guidelines:

Concrete

Prior to application remove any residual contamination by mechanical abrasion, sand blasting or power washing. On green concrete, remove all release agents, friable and loose concrete. Dry all visible and standing water prior to applying **DuraLink**. Install an appropriate backer rod to avoid three-point bonding.

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 **DuraLink** 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.

Clean-Up

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

Storage

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

Shelf Life

One year from date of manufacture when stored in standard conditions. High temperature and high relative humidity may significantly reduce shelf life. Pails have a shelf life of six months.

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 **DuraLink** 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.

Caution

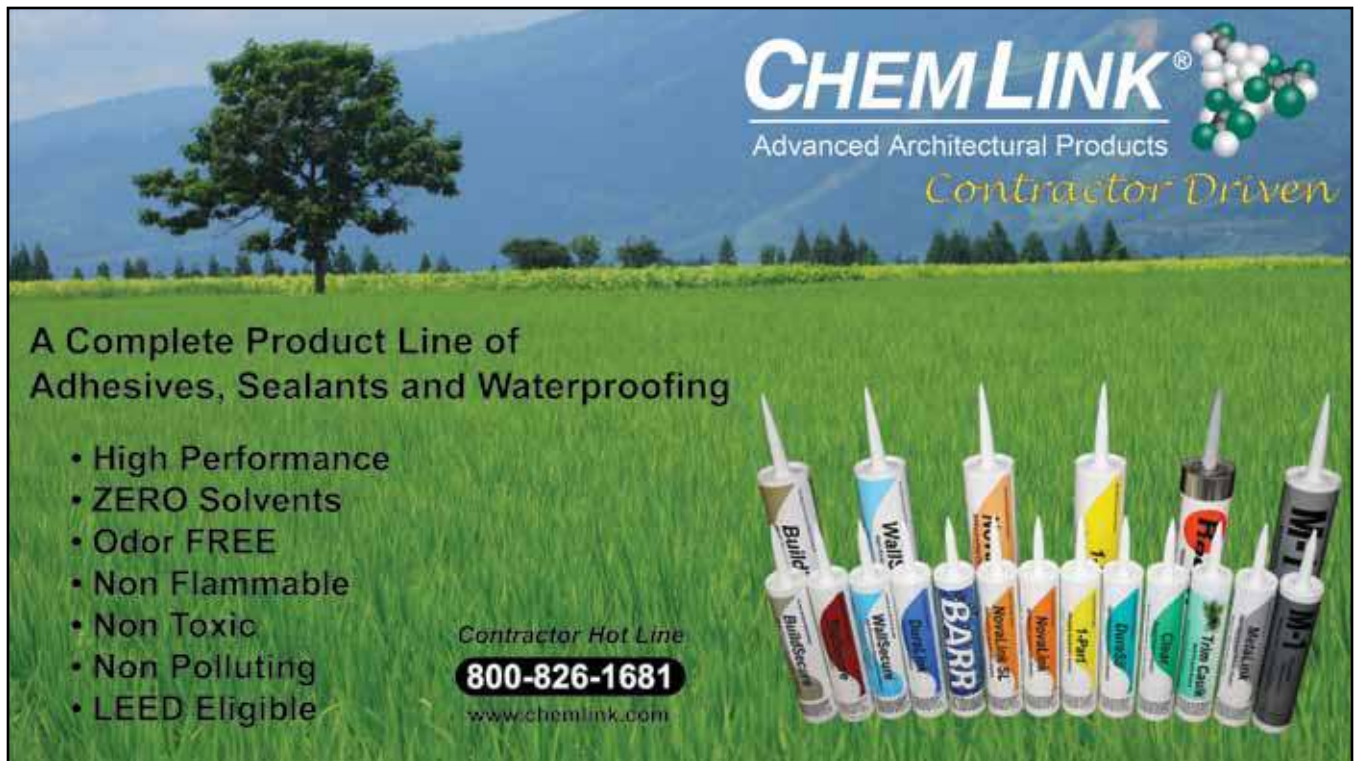
Avoid prolonged contact with skin. Uncured adhesive irritates eyes. In case of contact with eyes immediately flush with water. Call a physician. Please refer to the MSDS for first aid information.

See www.chemlink.com for most current MSDS .
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.
- Do not apply at temperatures below 30°F (-1°C).
- Test and evaluate all paints before application. Polyurethane and oil based paints may dry slowly.
- Do not use on TPO without CHEM LINK TPO primer.





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Notes:

Read and ensure that the most up-to-date MSDS and technical guidelines are being followed. Proper use and application are the responsibility of the applicator. Direct any questions to Technical Services at 800-826-1681 prior to starting the project.

IMPORTANT NOTICE

Except where prohibited by law, CHEM LINK Products makes no warranties, expressed or implied, statutory or otherwise, including but not limited to, any implied condition or warranty of merchantability or fitness for a particular purpose. User is responsible for determining whether this CHEM LINK Products material is fit for a particular purpose and suitable for user's method of application.

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