

Description

DuraLink is an extremely elastic moisture curing sealant designed for use on metal substrates, curtain wall construction and joints subject to very high movement. **DuraLink** has +/-50% joint movement.

DuraLink is thermosetting and adheres tenaciously to metal surfaces, most engineering plastics, and difficult to bond painted substrates such as Kynar 500® PVDF coated metal. The unique, fast setting alkoxy cure allows this adhesive to develop strength rapidly after only brief exposure to moisture and will not damage foam insulation.

DuraLink is elastomeric and exhibits excellent low temperature adhesion. **DuraLink** contains no solvent and can be used safely in confined work spaces.

Industrial Uses

Truck bodies and trailers	Rail cars and containers
Buses and RV's	Utility trailers
Manufactured housing	Aircraft
Furniture	Solar panels
Appliances	HVAC equipment
Marine applications	Sound damping
Vibration damping	Window assembly

Advantages

- 100% VOC compliant
- Bonds to Kynar 500® PVDF coated metal
- Solvent free
- 100% solids, will not shrink
- Non-slump, applies vertically and overhead
- 30 minute skin over
- +/- 50 joint movement
- No outgassing on damp surfaces
- Very good color stability, will not suntan
- Paintable within 24 hours
- Gun grade, no special tools or mixing required
- Can be applied at temperatures as low as 30°F (-2°C)
- Test and evaluate all paints before application, Alkyd and oil based paints may dry slowly.

Substrate Preparation

Bonding surfaces must be clean, dry and free of oxidation, mill oils, wax, and release agents that may interfere with adhesion. Dry and fully cure painted surfaces before bonding. Alcohol and ammonia water are effective cleaners for surface preparation. Abraded or irregular surfaces are acceptable bonding surfaces but must be clean and sound. All substrates must be free of manufacturing defects.

- * Test all substrates for bond strength and compatibility before using in production.

Application Instructions

DuraLink is a gun grade material that is applied from caulking guns, high viscosity pump guns, or automated bead application equipment. This product sets rapidly upon exposure to moisture. All application equipment must be clean and dry before using **DuraLink**. Open containers must be quickly protected from atmospheric moisture. Guns, pumps and hoses must be sealed when not in use.

Mask off areas that must be protected from adhesives.

Beads can vary in size from 1/16 inch to 3/8 inch diameter for best application control.

Apply adhesive to one side of the assembly. Do not use excessive adhesive.

Compress beads firmly between substrates to set bonds. Presses and clamps are usually not required.

Allow the assembly to cure for 30 minutes to an hour before handling or machining. When bonding two impermeable materials, brief separation and reassembly of the bonding surfaces to expose the adhesive to atmospheric moisture, will often accelerate the cure.

In extremely dry environments, local humidification may be needed to initiate curing. Low temperature will retard the cure reaction and heat will accelerate the cure reaction. Optimum application is between 60°F to 100°F (16°C to 38°C).

DuraLink will not shrink and may be used to fill gaps around bulkhead penetrations or seal joints. Fill the seam or void with **DuraLink** and tool to a smooth surface. Mask off areas as required to protect surface finish.

Storage

Store original, unopened containers in a cool, dry area at temperatures not in excess of 100°F / 38°C. Elevated temperatures will reduce shelf life. **DuraLink** will not freeze. For easy application do not store below 40°F / 5°C.

Shelf Life

Drums and pails: 6 month shelf life.

Sausages and cartridges: 6 month shelf life.

Standards and Compliance

- ASTM:C-920, Type S, Grade NS, Class 50, Uses NT, T, M, G, A, and O
- AAMA: 802.3-08 Type II, 803.3-08 Type I, and 805.2-08 Group C
- 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
- Conforms to OTC Rule for Sealants and Caulks
- Meets requirements of California regulations CARB, SCAQMD and BAAMQD
- Conforms to California Proposition 65
- Conforms to USDA requirements for non-food contact

Packaging

- 50 gallon, open head, pump drums
- Cartridges, 10.1 oz and 28 oz.
- 5 gallon pump pails
- Sausages available on request

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

* Color matching is available in batch quantity only

Typical Uncured Properties

Viscosity	900,000 - 1,200,000 cP at 72°F (22°C)	Brookfield RVF, TF spindle, 4 RPM
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 C-679
Skin Time	35 - 60 minutes	Industrial Method
Odor	Mild Mint Smell	Industrial Method

Typical Cured Properties

Elongation at break	750 - 800%	ASTM D-412
Peel Strength	25 - 30 pli	ASTM C-794
Tensile Strength	250 - 300 psi	ASTM D-412
Hardness Shore A	17 - 23	ASTM C-661
Lap Shear Strength	150 - 175 psi	ASTM D-1002
Low temp. flex	Pass -10°F (-23°C) ¼ inch mandrel	ASTM D-816
Shrinkage	No measurable shrinkage after 14 days	
Service Temperature	-40 to 220°F / -40 to 104°C	
Weathering	No cracking or chalking, slight matte finish after 2000 hours QUV "A" bulb. Durometer gain of 5 points.	

Important Notice

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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. Proper specification and application is the responsibility of the user. Prepare test assemblies to verify performance.

When in doubt call the Technical Hot Line at 800.826.1681

Chem Link Engineered Systems is a division of Chem Link Inc. P.O. Box 9, Schoolcraft, Michigan, 49087.