

# **DUO-SIL Ultra**®

# **ADVANCED HYBRID POLYMER SEALANT & ADHESIVE**

TECHNICAL DATA SHEET 01/08/2024

#### **SMART ADVANTAGES**

- Wet surface application
- Shrink, crack and fade resistant
- Bonds to Kynar® resin-based coatings

#### **DESCRIPTION**

Bostik DUO-SIL Ultra® is specifically designed to meet the needs of the professional contractor. It is a superior, all-purpose adhesive and sealant combining enhanced ease of application with long-term performance.

DUO-SIL Ultra® as a sealant can be used to fill butt joints in vinyl, aluminum and concrete siding, windows, doors, column joints, gutters, roofs, brick molding, counter tops, showers and most areas where a sealant is needed.

DUO-SIL Ultra® as an adhesive has superior bond to most building substrates and will adhere to wood, metal, gypsum board, vinyl board, cove base, molding, foam board and many more building products.

DUO-SIL Ultra® as an adhesive and caulking compound will not degrade Polystyrene foam bead board the way most solvent based or plasticized sealants do.

#### **PRODUCT FEATURES**

- All weather application wet, damp and dry surfaces
- 0°F (-18°C) to 140°F (60°C) application temperature
- Paintable in one hour
- · Available in 70+ industry colors in stock
- Meets or exceeds the requirements of ASTM C920, Class 50
- Meets the performance requirements of AAMA 803.3-10
- Interior/exterior applications including siding, windows, doors, trim and moldings
- Superior adhesion and sealing
- Environmentally safe, non-hazardous, non-flammable, and low VOC
- Non-yellowing formula
- Two-piece plastic cartridge will not deteriorate when exposed to the elements
- 4" detatchable nozzle for repeated use and increased efficiency

## **APPLICABLE STANDARDS**

DUO-SIL Ultra® meets or exceeds the standard specification for latex sealants ASTM C920, Type S, Grade NS, Class 50. DUO-SIL Ultra® complies with the specification requirements of AAMA 803.3-10 Type I.



## **APPLICATIONS**

DUO-SIL Ultra® can easily be applied with conventional hand or air-powered caulking equipment. The sealant should be applied in a continuous operation with adequate pressure to fill the joint to the proper width and depth (do not overfill the joint).

## DIRECTIONS FOR USE

- Cut spout to desired bead size. (3/8" recommended).
- Surfaces must be clean, dust and dirt free.
- Gun sealant into void to provide a solid fill.
- Can be painted over with latex or water-based paints after 1-2 hours providing a skin has been formed. For oil based paints, allow 24 hours before painting.
- Clean up excess material and tools with soap and water before curing.
- Store at room temperature.

#### JOINT DIMENSIONS

Joint size should not exceed 1" wide x  $\mathcal{V}_2$ " deep. If depth exceeds  $\mathcal{V}_2$ ", use backer rod.

## **JOINT BACKING BOND BREAKER**

Joint backing should be used to control the recommended joint depth and prevent 3-sided adhesion. Joint backing may be open cell polyurethane foam or closed cell polyurethane. Joint backing must be thoroughly dry. Where joint design or depth will prevent the use of joint backing, an approved adhesive backed polyurethane bond breaker tape must be installed to prevent 3-sided adhesion. Do not install more joint backing or bond breaker tape than can be caulked in one day.

This supersedes and replaces in its entirety all previously published versions of this document. T4383

#### **TOOLING**

Dry tool the sealant with light pressure immediately after application to ensure positive and complete contact of the sealant to the joint interface. May use a slightly wet spatula if necessary.

#### **MASKING**

Should masking be required, it is recommended the masking tape be removed before the sealant skins.

#### **COVERAGE**

Coverage will vary depending upon joint size. Approximate coverage for 10.1 fl.oz. (300 ml) cartridge covers 24 linear feet with a 1/4" bead and 11 linear feet with a 3/8" bead.

#### **LEED® CONTRIBUTION**

This Low VOC formulation (as calculated per SCAQMD Rule 1168), may contribute toward LEED® credits under section NC-v2.2 EQ 4.1: Low-Emitting Materials—Adhesives & Sealants.

#### **CLEAN UP**

After dry-wiping uncured sealant from substrates and tools, remaining uncured sealant can be removed by using Xylene, Toluene or similar aromatic solvents. Please refer to the MSDSs provided for these solvents before use. Bostik Hand Towel and Specialty Sealant Remover can also remove uncured sealant.

## STORAGE/SHELF LIFE

Product shelf life is 24 months under normal storage conditions between 40°F (4°C) and 80°F (27°C). Temperatures that are below 40°F (4°C) may result in freezing. Store in cool, dry, frost-free conditions.

#### LIMITATIONS

- Not recommended for prolonged immersion in water.
- Not recommended for underwater application or expansion joints.
- Do not use with plastic substrates without prior approval from Bostik.
- Some alkyd paints may not be compatible with DUO-SIL Ultra®
- Store at room temperature.
- Smearing and feathering Bostik DUO-SIL Ultra® over joints is not recommended.
- The use of Bostik DUO-SIL Ultra® as a nail hole filler is not recommended.

#### **PACKAGING**

Available in 9.5 fl oz (266ml) cartridges, 12 per case. 140 cases

Available in 20oz (591ml) sausages, white only, 12 per case. 45 cases per pallet.

### CAUTION

IRRITANT. MAY IRRITATE EYES, SKIN OR RESPIRATORY TRACT. CONTENTS MAY BE HARMFUL IF SWALLOWED OR INHALED. Do not breathe fumes. Do not get in eyes, on skin or on clothing. Do not swallow. Handle with care. Use only in a well-ventilated area or wear a mask. Wear protective clothing including gloves. Wash thoroughly after handling. Store in a cool, dry area. Do not reuse container.

#### **FIRST AID TREATMENT**

Contains proprietary silyl terminated polyether mixture, diisononyl phthalate (DINP), quartz silica and titanium dioxide inextricably bound in a polymer matrix. If in eyes or on skin, rinse well with water for at least 15 minutes. If on clothes, remove clothing. If inhaled, move person into fresh air. If swallowed, call a Poison Control Center or doctor immediately. Do not induce vomiting.

#### **KEEP OUT OF REACH OF CHILDREN**

#### SEE SAFETY DATA SHEET

Chemical Emergency: 800-424-9300 (USA),

703-527-3887 (International)

Medical Emergency: 866-767-5089

| CHEMICAL &                      | PHYSICAL PROPERTIES  |                                    |
|---------------------------------|--|------------------------------------|
| Chemical<br>Properties          | Chemistry Type   | Hybrid Polymer                     |
|                                 | Adhesive Type  | Sealant                            |
|                                 | VOC Compliant (calculated per SCAQMD Rule 1168)                                | Yes (<5 g/L)                       |
| Use<br>Environments             | New Construction   | Yes                                |
|                                 | Remodel  | Yes                                |
|                                 | Residential  | Yes                                |
|                                 | Offices/Light Commerical   | Yes                                |
|                                 | Heavy Commercial   | Yes                                |
|                                 | Offices  | Yes                                |
|                                 | Hospital   | Yes                                |
|                                 | Multifamily  | Yes                                |
|                                 | Highrise   | Yes                                |
|                                 | Exterior   | Yes                                |
|                                 | Wet Areas  | Yes                                |
| Application<br>Properties       | Ease of Gunning  | Easy                               |
|                                 | Odor   | Mild                               |
|                                 | Open/Working Time*   | 15 min                             |
|                                 | Color  | Multiple                           |
|                                 | Movement Accommodations  | +/- 50%                            |
|                                 | Specific Gravity   | 1.40 - 1.50                        |
|                                 | Application Temperature  | 0°F to 140°F<br>(-18°C to 60°C)    |
|                                 | Service Temperature  | -40°F to 275°F<br>(-40°C to 135°C) |
| Cured<br>Physical<br>Properties | Cure Time  | 1-2 weeks                          |
|                                 | Skinning Time  | 15mins @ 70°F (21°C)               |
|                                 | Shrinkage  | 0%                                 |
|                                 | Hardness (ASTM C661)   | Shore A 35-45                      |
|                                 | Peel Strength (ASTM C794)  | >20 lbf/in                         |
|                                 | Accelerated Weathering (ASTM C793)   | No cracks, stains, discoloration   |
|                                 | Cold Temperature<br>Flexibility (ASTM C734)                                    | Pass                               |
|                                 | Elongation at Break  | 500%                               |
|                                 | Paintability   | With most paints                   |
| LEED®<br>Contribution           | EQ 4.1: Low-Emitting<br>Materials: VOC (as calculated<br>per SCAQMD Rule 1168) | <5 g/L                             |

<sup>\*</sup> Per ASTM E203-01 Standard Test Method for water using Volumetric Karl Fischer Titration Method. Results rounded to the nearest tenth. Test Method has error range of +/- 0.2%.

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**BOSTIK HOTLINE** 

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