

# **HYBRI-SIL®**

# ADVANCED HYBRID POLYMER SEALANT & ADHESIVE

TECHNICAL DATA SHEET 09/20/2023

#### **SMART ADVANTAGES**

- Superior Adhesion to a Wide Range of Materials
- Interior and Exterior
- All Weather Application

#### **DESCRIPTION**

Bostik's HYBRI-SIL® is a hybrid-polymer sealant and adhesive. HYBRI-SIL® is odorless, neutral curing, and isocyanate free. HYBRI-SIL® can be used to seal windows, doors, column joints, vents, ducts, roofs, and siding. The low-VOC formula makes it ideal for interior applications where a sealant and adhesive are needed like crown molding and trim. HYBRI-SIL® is able to bond both porous and nonporous surfaces. HYBRI-SIL® is excellent at sealing through-roof penetrations and bonding to metal substrates.

Bostik, Inc. is the only recommended supplier of adhesives and sealants for Kynar 500° resin-based painted surfaces.

#### **FEATURES**

- Low VOCs
- Waterproof
- Can be applied to dry, wet, and damp surfaces
- No water washout
- No/low odor
- Bonds to Kynar® coated metals
- Paintable
- Does not shrink, crack, or peel
- No shrinkage and bubble free
- UV stability
- Wide temperature range
- Excellent adhesion to common building substrates: asphalt, metal, wood, masonry, PVC, vinyl, and other common building materials.

## **APPLICATION STANDARDS**

Bostik's HYBRI-SIL® meets or exceeds the standard specification for sealants ASTM C920, Type S, Grade NS, Class 50. HYBRI-SIL® complies with the specification requirements of AAMA 803.3-10, Type 1.

## **APPLICATIONS**

HYBRI-SIL® 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).



#### **JOINT DIMENSIONS**

Joint size should not exceed 1"  $\times$  1/2" (wide  $\times$  deep). For deeper joints, backer rod must be used.

# DIRECTIONS FOR USE

- PRIOR TO FULL INSTALLATION, APPLY TO A TEST AREA TO BECOME FAMILIAR WITH APPLICATION AND TO ENSURE PRODUCT SATISFACTION.
- Cut nozzle to desired bead size (3/8" is recommended).
- · Surfaces must be clean and free of dirt.
- · Gun sealant into void to provide a solid fill.
- Can be painted with latex or water-based paints after 1-2 hours.
  Oil-based paints require at least 24 hours curing time.
- Clean up excess materials and tools with soap and water. Cured sealant must be mechanically removed after cure.
- Store at room temperature

## 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 a day.

## **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.

This supersedes and replaces in its entirety all previously published versions of this document. B55550

#### **MASKING**

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

#### COVERAGE

Coverage will vary depending on joint size. Approximate coverage for a 9.5 fl.oz. (266 mL) cartridge is 22 linear feet when using a 1/4" bead and 10 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 the section NC-v2.2 EQ 4.1: Low Emitting Materials – Adhesives and 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. Refer to the SDSs of the solvents before use. Cured sealant can be removed mechanically.

#### STORAGE/SHELF LIFE

Product shelf life is 18 months from the date of manufacture. Storage conditions must be between 40°F and 80°F.

#### LIMITATIONS

- · Not recommended for prolonged immersion in water\*
- · Not recommended for underwater applications
- Not recommended for expansion joints
- · Some alkyd paints may not be compatible
- · Store at room temperature
- · Smearing and feathering over joints is not recommended
- · Not recommended as a filler
- Not recommended for polyethylene, Teflon, plastic, or polypropylene surfaces

#### **PACKAGING**

Available in 9.5 fl oz (266 mL) cartridges, 12 per case

#### voc

<50 g/L based on EPA 24 testing method

#### WARNING

IRRITANT. MAY IRRITATE EYES, SKIN OR RESPIRATORY TRACT. CONTENTS MAY BE HARMFUL IF SWALLOWED OR INHALED. CONTAINS POTENTIAL SENSITIZER. MAY CAUSE ALLERGIC SKIN OR LUNG REACTION. 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.

# KEEP OUT OF REACH OF CHILDREN

CHEMICAL & PHYSICAL PROPERTIES		
Chemical Properties	Chemistry Type	Hybrid Polymer
	VOC Compliant	Yes (<5 g/L)
Use Environments	New Construction	Yes
	Remodel	Yes
	Residential	Yes
	Offices/Light Commercial	Yes
	Heavy Commercial	Yes
	Offices	Yes
	Hospital	Yes
	Multifamily	Yes
	Exterior	Yes
	Interior	Yes
Application Properties	Application Use	Sealing & Bonding
	Ease of Gunning	Easy
	Odor	Low/No
	Application Temperature	0°F to 140°F
	Color(s)	White, Black, Bronze
Cured Physical Properties	Cure Time	24 to 48 hours
	Skinning Time	15 minutes
	Shrinkage	0%
	Service Temperature	-75°F to 350°F
	Hardness (ASTM C661)	40
	Movement Accommodations	+/- 50%
	Paintable	Yes
LEED® Contribution	EQ 4.1: Low-Emitting Materials: VOC (as calculated per SCAQMD Rule 1168)	<50 g/L

## **FIRST AID TREATMENT**

Contains proprietary silyl terminated polyether mixture, diisononyl phthalate (DINP), and quartz silica or carbon black inextricably bound in a polymer matrix. Methanol may form during curing. 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.

#### SEE SAFETY DATA SHEET

**Chemical Emergency:** 800-424-9300 (USA), 703-527-3887 (International) **Medical Emergency:** 866-767-5089

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## Bostik, Inc.

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<sup>\*</sup>Not for continuous water immersion