

ONEBOND — Technical Datasheet

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All-in-One Hybrid Adhesive & Sealant for Professional Use

ONEBOND is a high-performance, single-component hybrid sealant and adhesive based on modified silane (MS) polymer technology. It is engineered for **all-weather**, **all-surface** performance in demanding environments — reliably bonding and sealing even on **wet surfaces** without primer. ONEBOND remains **permanently elastic**, cures with ambient humidity, and delivers **excellent tooling**, **high mechanical strength**, and **superior environmental resistance** — all without solvents, isocyanates, acids, alkalis, or silicone.

Key Applications

- General construction sealant and adhesive
- Flooring transitions (parquet, laminate, LVT, wood, vinyl, plastic)
- Expansion and connection joints (interior & exterior)
- Horizontal and vertical floor joints
- Concrete joint sealing (non-traffic-bearing)
- Window and door installations
- Weather sealing for building envelopes
- Adhesion to natural stone and sensitive substrates

Technical Specifications

Property	Value	Standard
Base Chemistry	Modified Silane (MS Polymer)	-
Cure Rate @ 73°F / 50% RH	Approx. 0.08 in / 24 hrs	ASTM C679
Shore A Hardness	40	ASTM C661
Density	11.75 lb/gal ± 0.17	ASTM D1475
Skin Formation Time @ 73°F / 50% RH	~25 minutes	ASTM C679
Modulus @ 25% Elongation	> 58 psi	ASTM C719
Tensile Strength (Cured)	~290 psi	ASTM D412
Elongation at Break	~700%	ASTM D412
Elastic Recovery	≥ 70%	ASTM C736
Volume Shrinkage	≤ 5%	ASTM C1241
Service Temperature Range	-40°F to +220°F	-
Application Temperature	32°F to 150°F	-

Chemical Resistance

- Good: water, dilute acids, alcohols, aliphatic solvents
- Poor: aromatic solvents, concentrated acids, chlorinated hydrocarbons



Performance Characteristics

- Simultaneously **bonds and seals** one product, multiple functions
- Cures reliably on damp or wet surfaces ("Hybrid loves moisture")
- **Permanently elastic** ideal for dynamic joints
- Excellent **toolability** and smooth extrusion
- No primer needed on most substrates (metal, glass, coated wood, PVC)
- Strong adhesion to natural stone **no edge staining** (ISO 16938-1 verified)
- Paintable after skin forms (compatibility testing recommended)
- Excellent UV and weathering resistance
- Free from solvents, silicone, isocyanates, acids, and alkalis
- Low odor and easy to apply in confined spaces

Certifications & Compliance

- **ASTM C920**: Type S, Grade NS, Class 25 (technical equivalency formal certification pending)
- DIN EN 15651-1 & -4: F-EXT-INT-CC 25HM, PW-EXT-INT-CC 25HM
- VOC Compliance:
 - EMICODE EC1 Plus
 - Indoor Air Comfort GOLD
 - SCAQMD Rule 1168 compliant
- USDA Non-Food Contact Suitability

ONEBOND Hybrid Adhesive & Sealant is a solvent-free, isocyanate-free formulation suitable for use in non-food contact applications in facilities regulated by the USDA. Its composition complies with the general principles of **21 CFR 175.105 (Adhesives for indirect food contact)**, making it appropriate for use in structural and equipment components where adhesive contact with food is not intended. *It is the responsibility of the end user to ensure compliance with all applicable regulations and to confirm suitability for specific facility requirements.*

• **Proposition 65**: ONEBOND Hybrid Adhesive & Sealant is free from substances that require Proposition 65 warnings in its intended use as a construction adhesive and sealant. While the product contains titanium dioxide as part of its formulation, it is present in a bound state and not in the form of airborne respirable dust. Therefore, no Proposition 65 warning is required.

Surface Preparation

- Substrates must be clean, dry, and free of oil, dust, old sealant, or loose particles.
- **Primer typically not required**. On porous substrates (e.g., fiber cement, concrete), a primer is recommended for high movement or exposure.
- Apply in vertical beads for ventilation when used as an adhesive.



Limitations

- Not recommended for bonding polyethylene (PE), polypropylene (PP), PTFE, PMMA, or bituminous/asphaltic surfaces
- Not suitable for submerged conditions
- Not for use on freshly treated wood or asphalt (allow curing)
- Curing slows below 32°F or in low humidity environments
- Always test paint compatibility prior to application

Shelf life: 18 months in cartridges and foils when stored at 50°F–77°F (10–25°C). Unlike other hybrids, ONEBOND retains full performance even after extended storage under standard conditions.

Disposal & Safety

Refer to SDS for proper handling, safety, and disposal. Complies with relevant **OSHA** and **U.S. EPA** regulations.

Warranty & Limitation of Liability

The technical data and application information provided in this datasheet is based on our current knowledge and experience. It reflects typical performance under standard conditions. However, because the conditions under which this product may be applied are beyond our control, it is the sole responsibility of the user to determine the product's suitability for the intended application, including all compatibility and performance testing.

Oskorp warrants only that the product, at the time of shipment, meets the specifications stated herein. **No** other express or implied warranties are provided, including any warranty of merchantability or fitness for a particular purpose.

Oskorp is not liable for any incidental, indirect, or consequential damages resulting from the use of this product. In the event of a verified defect, our sole obligation is to replace the product or refund the purchase price.

Product users are responsible for ensuring that the use of the product complies with all applicable regulations and does not infringe on third-party rights.