

# InnoStar Solutions, Inc

## Non-Skinning Butyl Sealant



### PRODUCT INFORMATION SHEET

2015

#### Product Description

InnoStar Solutions Butyl Sealant is a non-skinning, high solids, non-drying, synthetic butyl elastomer sealant.

#### Product Benefits

- Excellent adhesion to ZINCALUME®, KYNAR500®, stainless steel, polyvinylidene fluoride, Galvalume®, Galvalume® Plus, aluminum, concrete, gypsum, wood surfaces, foam boards, plastic and fiberglass.
- Does not corrode Galvalume® or copper
- VOC compliant (52 g/L)
- Not flammable, flashpoint (158°F)
- Minimal cut-off strings, Minimal cob webbing, Non-messy
- Microscopic skin-over minimizes sealant transfer & dust pick-up after application before panels are joined
- Factory sealed panels bonded in field up to 6 months after application
- Panels easily separated after extended periods for repair or maintenance
- Exhibits excellent tackiness for permanent bonding
- Contains anti-microbial agent which inhibits growth of mildew
- Excellent resistance to severe heat, cold, and moisture
- Compatible with most grades of flashing for waterproofing

#### Typical Applications

- Factory sealing the female lip of standing seam roof and wall panels and concealed end laps.
- Field caulking for insulated wall panel joints & other metal building components
- Reducing sound and vapor transmission as acoustical sealant
- Sealing between dissimilar metals to prevent electrolysis
- Sealing base plates to concrete slabs
- Use as a window and door installation bedding sealant
- Flows into panel joint at erection temperatures ranging from -10F to +140F

#### User Instructions

- Surface Preparation: Apply to clean, dry, sound, and frost free surfaces
- Keep non-skinning butyl sealant from sight line when painting is necessary
- Testing for intended applications before proceeding with complete job is recommended to ensure adhesion and material compatibility
- Cartridges and sausages can be dispensed via standard manual or pneumatic caulking guns. Pails and drums are dispensed via typical bulk ram pumps. Contact InnoStar Solutions Inc. for detailed assistance
- Clean-up: Mineral spirits or similar solvents

#### Specification Conformance

- Federal Specification TT-C-1796A. Caulking compounds, metal seam, and wood seam (Type I)
- AAMA 800-92: Flexibility cold testing to -100°F
- AAMA 809.2: Specs for non-drying sealants
- ASTM E1680-95: Standard test method for rate of air leakage through exterior metal roof panel systems
- ASTM E1646-95: Standard test method for water penetration of exterior metal roof panel systems by uniform static air pressure differential
- ASTM E2140-01: Standard test method for water penetration of metal roof panels by static water pressure head
- FDA regulated for food contact
- USDA and CFIA accepted

#### Packaging

- 10.1 & 29 oz. cartridges
- 10 oz. and 20 oz. sausages
- 5 gallon pails
- 55 gallon drums

#### Color

- Off-white and Gray

#### Shelf Life

- 18 months in unopened container when stored below 90°F

#### Precaution Information

- CAUTION: COMBUSTIBLE LIQUID & VAPORS. Contains mineral spirits. Keep away from heat and flame. Avoid skin contact. Wash thoroughly after handling. Avoid breathing vapors. Use with adequate ventilation. Not for internal consumption
- SEE MSDS for additional information
- KEEP OUT OF REACH OF CHILDREN

#### Important Notice

InnoStar Solutions, Inc. MAKES NO WARRANTIES, EXPRESS OR IMPLIED, INCLUDING, BUT NOT LIMITED TO ANY IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE. User is responsible for determining whether the InnoStar Solutions Inc. product is fit for a particular purpose and suitable for user's method of application. Given the variety of factors that can affect the use and performance of an InnoStar Solutions Inc. product, many of which are uniquely within the user's knowledge and control, it is essential that the user evaluate every product to determine whether it is fit for a particular purpose and suitable for the user's method of application.

# Technical Data

## **Physical Properties**

Color	Off-white or Gray
VOC Content (via EPA Method 24)	3.5%
Total Solids (ASTM C 681)	93 - 96%
Volume Shrinkage (ASTM D 2453)	Up to 9%
Weight per US Gallon (ASTM D 1475)	12.90 - 13.14 lbs
Wet Flammability (ASTM D56)	158°F
Extrudability (ASTM D 2452)	40 - 60 sec. per 20 grams thru 0.104" orifice @ 50 psi
Drying Time	Non-skinning, remains permanently soft and tacky
Sag (ASTM D 2202)	Nil
Service Temperature Range	100°F to 200°F (-70°C to 90°C)
Application Temperature Range	10°F to 120°F (-10°C to 50°C)
Engageability	Sealant will engage easily to make a joint at 10°F
Vehicle Bleedout (ASTM D 925 Method A)	No visible exudation of vehicle from sealant after 3 weeks at 158°F (70°C) on painted or unpainted metal surfaces
Flexibility (ASTM C 711)	No loss of adhesion to -100°F
Non-corrosive	No darkening, etching or salt deposits on Galvalume®, Galvalume Plus®, Acrylume®, Zinalume®, Kynar 500®, aluminum, aluminized steel, or galvanized metal
Staining (ASTM D 925 Method A)	Sealant will not stain a painted surface
Adhesion (ASTM C 794)	Excellent adhesion to oily Galvalume®, Galvalume Plus®, Acrylume®, Zinalume®, Kynar 500®, aluminum, aluminized steel, or galvanized metal
Oil Migration (Fed Spec TT-C-1796A)	Does not exude oil when applied between 2 metal panels bolted together allowing 1/16" seal. Assembly conditioned for one week at 158°F
Resistance to fungus/mildew growth	Will resist fungal attack and not support mildew growth
Heat Aging	No loss of surface tack or adhesion
Weatherability (ASTM G 154)	No cracking, bleeding or loss of rubbery characteristics
Chemical Resistance	Excellent to water, ozone, water vapor, alcohols; Fair to weak for acids and bases. Poor to organic solvents
Static Water Pressure Head Test (ASTM E-2140-01)	Sealant passes 6 inches of static water pressure head, no leakage
Rate of Air Leakage Thru Exterior Metal Roof Panel Systems (ASTM E 1680)	Sealant passes. Air infiltration @ 1.57 psf → 0.0016 cfm/ft <sup>2</sup> and 0.0032 cfm/lin ft. Air infiltration @ 6.24 psf → 0.0037 cfm/ft <sup>2</sup> and 0.0073 cfm/lin ft
Water Penetration of Exterior Metal Roof Panel Systems by Uniform Static Air Pressure Difference (ASTM E 1646)	Sealant passed. No water leakage.
Toxicity	Contains no carcinogenic ingredients. Dispose in accordance with local regulations. Meets FDA, USDA and CFIA.

## **Limitation of Liability**

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