

Product Data Sheet

70991 (47XJB) Polyurethane Sealant



Description:	70991 (Hempel 47XJB) is a one-component, contractor/construction grade, smooth polyurethane sealant.
Recommended use:	70991 is used for sealing the following: expansion and control joints in pre-cast concrete panels; various roofing and siding applications; perimeters of doors, windows, and other wall penetrations.
Features:	May be used with most building materials, including stone, masonry, ceramic, marble, wood, steel, aluminum, fiber cement board and many other synthetic materials. Easy gunning; reduces installer's fatigue. Bonds well to most common building materials. Quicker skin and cure time; reduces jobsite dirt pickup.
Service temperatures:	-40°F–150°F (-40°C–66°C)
Certificates/approvals:	Type S, Grade NS, Class 25, Use NT, A and M. US Federal Specification TT-S 00230C (COMB-NBS) for one-component sealants as Class A, non-sag. Canadian Specification CAN/CGSB 19.13-M87. CARB and SCAQMD Compliant. Meets VOC requirements for OTC Regulation.
Availability:	Available in North America. Not included in Group Assortment; other regions must confirm.

Colors and packaging:

70991-4 (47XJB1L030)	Gray	10.1-oz cartridge
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Physical constants:

Hardness (Shore A)	42	ASTM D2240
Modulus @ 100% Elongation	65 psi	ASTM D412
Modulus @ 25% Elongation	45 psi	ASTM D412
Tensile Strength @ Break	133 psi	ASTM D412
Elongation @ Break	685%	ASTM D412
UV Resistance	Pass	ASTM C793
VOC	43 g/L (2.8%)	Calculated
Adhesion Peel	> 5 piw	TT-S-00230C/ASTM C794
Joint Movement Capability	+25%	TT-S-00230C/ASTM C719

Tool/Work Time	60 minutes
Skin Time	4 hours
Curing Time @ 77°F (25°C)	2–7 days, 1/16" per day
Flow, Sag or Slump	0.1 inch

The above tested results are typical values. Individual lots may vary up to 10% from the typical value. Further technical information can be found at www.neogard.com.

Application details:

Application method:	Caulking gun
Cleaning:	Clean tools with an aromatic solvent. Dry-wipe excess uncured sealant from surfaces, then follow with a solvent wipe. Cured sealant is difficult to remove without damaging the substrate.

Safety: Handle with care. Before and during use, observe all safety labels on packaging and paint containers, consult Neogard Safety Data Sheets and follow all local or national safety regulations.

Surface preparation: Surface must be clean, sound, and dry. Do not apply over damp, contaminated, loose surfaces, old sealants, or other foreign substances that may impair adhesion. Pre-test substrates with a sample of 70991 before full application.

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Application conditions: Do not install when the dew point of the substrate is close to ambient temperature, or if moisture-vapor transmission (MVT) is present. Damp substrates with high moisture content will cause bubbling and foaming.
Lower relative humidity and temperature will significantly extend curing time. Confined areas, deep joints, and moisture barrier substrates may also affect the full cure time and extend it by many days.
High temperature/humidity can cause bubbles to develop during the curing process.

Subsequent coat: According to Neogard system Guide Specifications. Test paints or coatings for adhesion before general application.

Remarks: Do not apply to copper substrates.
Will cause staining of porous substrates such as marble, limestone, and granite.
Not for sealing narrow joints, fillet joints, and face nail holes.
Not recommended for smearing and feathering over joints.
Not recommended by itself joints where abrasion resistance is required (walkways, driveways, runways, etc.).
Not for continuous immersion in water or any other fluid, or exterior or interior sealing below the waterline.
Not for glazing applications. Bond line strength can be affected by UV rays through the clear material (glass, acrylic glass, polycarbonate).
When fully cured, avoid exposure to fuels, or chlorinated, acid, or alkaline solutions.
Contact with asphalts and other filler compounds impregnated with oil, asphalt, tar, etc., may deteriorate the cohesive strength of the substrate and ultimately compromise the seal.
Lower relative humidity and temperature will significantly extend curing time. Confined areas, deep joints, and moisture barrier substrates may also affect the full cure time and extend it by many days.
Exposure to UV/sunlight will alter original color or gloss. Effect is limited to the surface layer and will not compromise the sealing properties if joint dimensions are proper and the sealant is properly applied.
Check shelf life prior to use. Do not use past shelf life. Shelf life of polyurethane sealants may be significantly reduced by high temperature and high relative humidity.

Application coverage rates (linear feet per 10.1 fl oz cartridge):

		Width							
		1/8"	1/4"	3/8"	1/2"	5/8"	3/4"	7/8"	1"
Depth	1/8"	99	49	33	24	20	16	14	12
	1/4"	NA	24	20	12	10	8	7	6
	3/8"	NA	NA	11	8	6	5	5	4
	1/2"	NA	NA	NA	6	5	4	3	3

Note: 70991 is for professional use only.

Issued by: Hempel (USA) – 47XJB

This Product Data Sheet supersedes those previously issued.

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