

TECHNICAL DATA SHEET

PRODUCT DESCRIPTION:

Acryl-R[®]SM5591 is a one component, acrylic self-leveling compound designed to seal mechanically fixed joints. After cure, this sealant exhibits a tough ductile mass that fulfills the sealant requirements of many commercial tight seam applications.

ADVANTAGE:

- Excellent adhesion
- Outstanding UV resistance – non yellowing
- Easy to apply
- Fast skinning
- Cures to a ductile consistency
- Permanently flexible
- Paintable/ Mildew resistant
- Primerless adhesion to substrates, including anodized and mil finish aluminum, steel, galvanized steel, fiberglass, many plastics and rubber roofs.
- SCAQMD and OTC compliant

TYPICAL USES:

- Narrow corner joints and screw heads.
- Sealing rivet seams and fasteners.
- Sealing corner moldings and fabricated lap seams.

APPLICATION LIMITATIONS:

Not recommended for use:

- On frost-bearing surfaces or when the temperature is below 40°F (4.6°C)
- On joints that will be subjected to continuous water immersion.
- Joints contaminated with silicone type cutting or fabricating oils.
- As a sealant on polycarbonate or acrylic surfaces when in tension.
- On polystyrene or foam insulation.
- Dynamic expansion joints.

TYPICAL PROPERTIES:

Property	Typical Value	Test Method
Odor:	Sweet solvent odor	before cure; None after cure
Percent Solids:	55 % Min.	
Viscosity:	44,000 – 83,200 cps	HBT Brookfield Viscometer
Flash Point:	54.0°F (12.2°C)	ASTM D56 Tag Closed Cup
VOC	364 g/L	EPA Method 24
Elongation:	200% Min.	ASTM D412
Hardness: Shore A	20 A min.	ASTM C 661
Peel Adhesion: (glass/aluminum)	≥5 pli (22N)	ASTM C794
Sag:	0.4" max.	ASTM D2202
Water Resistance:	Passes	AAMA 800
Service Temperature Range:	0°F – 180°F (-17.77°C – 82.22°C)	
Shelf Life:	SM5591 has a shelf life of 18 months when stored in original closed containers at or below 80°F (26.67°C)	

SPECIFICATION COMPLIANCE:

AAMA 803.3
(Narrow Joint Seam Sealers)

APPLICATION:

Surface Preparation

- Do not open until ready for use. Cut nozzle to desired bead size. Puncture seal inside spout.
- Exercise care during application and tooling to prevent air entrapment.
- Fill joints from the deepest point to prevent air entrapment.
- Tooling should be done in one continuous stroke.
- Excess sealant should be wiped from all surfaces while still uncured.
- If joint surfaces have been masked, remove masking tape immediately after tooling.
- Surfaces must be clean, dry and free of oil or grease.
- Mill finish aluminum may contain an invisible oil film or oxide. Clean with a good degreasing solvent such as acetone or exempt solvent.

Joint Design

- Narrow joints (less than 3/32" [2.38mm] wide) should be sealed using a triangular or round bead which laps both adherends by 1/8" (3.17mm) minimum. Avoid applying sealant to one adherend edge before assembly as squeeze out will not provide sufficient sealant in the joint. In all joints, sealant depth (thickness) would be at least 3/32" to 1/8".
- Joint width should not exceed 3/16" and sealant width should be sufficient to provide 1/8" minimum contact with each adherend.
- Use care in applying sealant on vertical surfaces as an excessive amount will cause flow from the joint and run down the surface.

Clean up

- Remove all excess sealant smears adjacent to the joint with acetone, isopropyl alcohol or VOC compliant exempt solvent.
- Tools and application equipment may also be cleaned with acetone or other VOC exempt solvents.

* The use of acetone (or other solvents) can be hazardous to your health. Use only in a well-ventilated area. KEEP AWAY FROM OPEN FLAME. Read all labeling before use. Follow solvent manufacturer's recommendations and instructions for safe handling.

PRECAUTIONS:

If this product is used in direct contact or in close proximity with any other sealant or elastomer, a compatibility test must be conducted by the purchaser or user prior to use. The suitability of this product, for each intended use, must be determined by the purchaser prior to acceptance.

PRETEST FOR ADHESION:

Pretest for adhesion is intended to eliminate potential field problems, by testing SM5591 with samples of substrates on which it will be applied. This testing will aid in determining the proper surface preparation method and effective cleaning techniques prior to application.

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Complete technical information is available from
ITW Polymers Sealants North America, Inc.