



PRI Construction Materials Technologies LLC

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Laboratory Test Report

Report for: Judy Huang
Zhengzhou Zhongyuan Silande High Technology Co., Ltd.
No. 28 Dongqing West St., Zhengzhou Hi-Tech Development Zone
Zhengzhou, Henan
P.R. China – 450001

Product Name: MF899

Project No.(s): 2427T0004

Date(s) Tested: July 3, 2022 – March 25, 2023

Test Methods: ASTM C1184

Results Summary: Compliant with ASTM C1184

Purpose: Determine specification properties of the identified product for compliance with ASTM C1184: *Standard Specification for Structural Silicone Sealants*.

The product tested is a single part, RTV, neutral-cure silicone structural sealant.

Test Methods: Testing was completed as described in ASTM C1184: *Standard Specification for Structural Silicone Sealants*. Test methods assigned or referenced include ASTM C603: *Standard Test Method for Extrusion Rate and Application Life of Elastomeric Sealants*, ASTM C 639: *Standard Test Method for Rheological (Flow) Properties of Elastomeric Sealants*, ASTM C661: *Standard Test Method for Indentation Hardness of Elastomeric-Type Sealants by Means of a Durometer*, ASTM C679: *Standard Test Method for Tack-Free Time of Elastomeric Sealants*, ASTM C792: *Standard Test Method for Effects of Heat Aging on Weight Loss, Cracking, and Chalking of Elastomeric Sealants*, ASTM C1135: *Standard Test Method for Determining Tensile Adhesion Properties of Structural Sealant*, ASTM C1442: *Standard Practice for Conducting Tests on Sealants Using Artificial Weathering Apparatus*.

Sampling: The following materials were received by PRI.

<u>Product</u>	<u>Lot#</u>	<u>Source</u>	<u>Date</u>	<u>Sampling</u>
MF 899		Zhengzhou, China	January 3, 2022	Manufacturer

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The laboratory test results presented in this report are based on the material(s) supplied and tested. The results, and by extension any statements of conformity, opinions, or interpretations, apply the "simple acceptance" decision rule for measurement uncertainty accounting. This report is for the exclusive use of stated client. Only the client is authorized to permit copying or distribution of this report and then only in its entirety. PRI Construction Materials Technologies LLC assumes no responsibility nor makes a performance or warranty statement for this material or products and processes containing this material in connection with this report.

Results:

Property	Test Method	Result	Requirement
Rheological Properties (in) 1 specimen; 3/4" x 1/2" x 6"; Type IV Cond. sealant 16h @ 73.4±3.6°F & 50±5%RH; Cond. channel 2h @ Temp; Test Cond. 4h @ Temp	ASTM C 639		
Vertical Slump at 40±3.6°F		0	≤ 3/16
Vertical Slump at 122±3.6°F		0	≤ 3/16
Horizontal Slump at 40±3.6°F		Pass	No deformation
Horizontal Slump at 122±3.6°F		Pass	No deformation
Extrudability (s) 1 specimen; Cond. sealant 16h @ 73.4±3.6°F & 50±5%RH; Test Cond. @ 73.4±3.6°F & 50±5%RH; Curing period 30 minutes; Test with no nozzle @ 50psi	ASTM C 603	3	< 10
Hardness (Shore A) 3 specimens; 5" x 1-1/2" x 1/4"; 2 measurement readings per specimen (6 total); Cond. 14d @ 73.4±3.6°F & 50±5%RH; Test Cond. 73.4±3.6°F & 50±10%RH; Test Durometer, Type A-2	ASTM C 661	33	20-60
Effects of Heat Aging (%) 3 specimens; 5" x 1-1/2" x 1/4"; Cure 7d @ 73.4±3.6°F & 50±5%RH; Cond. 21d @ 190±10°F	ASTM C 792		
Weight Loss (%)		3	≤ 10
Visual examination for presence of cracks or chalking		Pass	No cracking or chalking
Tack-Free Time (h) 2 specimens; 3-3/4" x 1" x 1/8"; Test Cond. 73.4±3.6°F & 50±5%RH	ASTM C 679	1	≤ 3

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Property	Test Method	Result	Requirement
Tensile Adhesion on hybrid specimens' glass and aluminum (psi) 5 specimens per condition; 3/8" x 1/2" x 2"; Cure 21d @ 73.4±3.6°F and 50±5%RH; Rate 1/2"/min Condition as follows:	ASTM C 1184		
Standard conditions		92	≥ 50
Test Cond. 1h @ 88±5°C		102	≥ 50
Test Cond. 1h @ -29±2°C		89	≥ 50
Test Cond. 7d immersed in DI water @ 23±2°C		76	≥ 50
Test Cond. 5,000h UV/Con	ASTM C 1442 Sec. 7.3	105	≥ 50

Statement of Compliance: The product tested complies with the physical requirements specified in ASTM C1184: *Standard Specification for Structural Silicone Sealants* as described herein. The laboratory test results presented in this report are representative of the material supplied.

Signed:


 Jason Simmons
 Director

Date:

April 18, 2023

Report Issue History:

Issue #	Date	Pages	Revision Description (if applicable)
Original	04/18/2023	3	NA

END OF REPORT

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