



## TEST REPORT

<b>In Account With</b> <b>SPECIALTY SILICONE PRODUCTS</b> <b>CORPORATE TECHNOLOGY PARK</b> <b>3 McCrea Hill Road</b> <b>Ballston Spa, NY 12020</b> <b>Attn: Marty Migliori</b>	<b>Date</b> <b>December 10, 2018</b>	<b>Page 1 of 3 Pages</b>
	<b>W.O. Number</b> <b>64315</b>	<b>Specification</b> <b>ASTM E 595</b>
	<b>P.O. No.</b> <b>0027493</b>	<b>Received</b> <b>11-29-18</b>

**IDENTIFICATION:** Five (5) sample materials were submitted for Outgas Testing in accordance with ASTM E 595. The test samples were identified as follows:

- 1) SSP2529 JM20 2/177C
- 2) SSP2486-70DB
- 3) SSP2368-65DB
- 4) SSP2476-65
- 5) R+D 18-1109-3

**SPECIFICATION :** ASTM E 595.

**REFERENCE :** Purchase Order Number 0027493.

**TESTING :** Outgas Testing.

**SUMMARY :** The test results, reported herein, are submitted for customer evaluation.

Respectfully submitted,  
PACIFIC TESTING LABORATORIES, INC.

Casie Giblin  
Materials Engineer

Reviewed by,

Hans Shin  
Laboratory Director

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**OUTGAS TESTING**

**REFERENCE** : ASTM E 595.

**REQUIREMENT** : ASTM E 595, paragraph 1.5:

The criteria used for the acceptance and rejection of materials shall be determined by the user and based upon specific component and system requirements. Historically, a total mass loss (TML) of 1.00% and collected volatile condensable material (CVCM) of 0.10% have been used as screening levels for rejection of spacecraft materials.

**TEST METHOD** : The Outgas Test was performed in a vacuum environment of less than  $5 \times 10^{-5}$  torr according to ASTM E 595, for a duration of 24 hours, at 125°C. The TML, CVCM, and the amount of Water Vapor Recovered (WVR) were measured after the test.

**RESULTS** : The following tables list the results of the testing:

Table 1: Outgas test results.

Sample	TML (%)	CVCM (%)	WVR (%)
SSP2529 JM20 2/177C	0.27	0.09	0.03
SSP2486-70DB	0.14	0.05	0.02
SSP2368-65DB	0.08	0.03	0.01
SSP2476-65	0.07	0.04	0.02
R+D 18-1109-3	0.11	0.03	0.05

Table 2: Testing observation results for SSP2529 JM20 2/177C.

Observations			
Visible Condensate	Yes	Opaque	No
Percent Covered	100%	Interference Fringes	No
Thin	No	Colored Fringes	No
Heavy	Yes	Sample appearance after test	No change
Transparent	Yes		

**RESULTS** :  
**(continued)**

Table 3: Testing observation results for SSP2486-70DB.

Observations			
Visible Condensate	Yes	Opaque	Yes
Percent Covered	50%	Interference Fringes	No
Thin	Yes	Colored Fringes	No
Heavy	No	Sample appearance after test	No change
Transparent	No		

Table 4: Testing observation results for SSP2368-65DB.

Observations			
Visible Condensate	Yes	Opaque	No
Percent Covered	50%	Interference Fringes	Yes
Thin	Yes	Colored Fringes	Yes
Heavy	No	Sample appearance after test	No change
Transparent	Yes		

Table 5: Testing observation results for SSP2476-65.

Observations			
Visible Condensate	Yes	Opaque	No
Percent Covered	50%	Interference Fringes	Yes
Thin	Yes	Colored Fringes	Yes
Heavy	No	Sample appearance after test	No change
Transparent	Yes		

Table 6: Testing observation results for R+D 18-1109-3.

Observations			
Visible Condensate	Yes	Opaque	No
Percent Covered	50%	Interference Fringes	Yes
Thin	Yes	Colored Fringes	Yes
Heavy	No	Sample appearance after test	No change
Transparent	Yes		

**REMARKS** : The test results, reported herein, are submitted for customer evaluation.