

May 3, 2019

TEST REPORT

PN 147899
PO 0028056

PHYSICAL TESTING DEPARTMENT

Prepared For:

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Rev 101218



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SUBJECT: Physical Testing on material submitted by the above company MIL-DTL-25988 Table 3 Type 2 Class 1 Grade 40 test specification.

RECEIVED: Four (4) slabs and six (6) buttons identified as Blue SSP267VBlue Batch: JN036.

ORIGINAL PHYSICAL PROPERTIES, ASTM D 412, D 2240, D 297

Die C dumbbells tested at 20 in/min.

	<u>RESULTS</u>	<u>REQUIREMENTS</u>	<u>PASS/FAIL</u>
Durometer A, points	41	40 ± 5	Pass
Tensile Strength, psi	1146	800 min.	Pass
Ultimate Elongation, %	439	225 min.	Pass
100% Modulus, psi	187	-	-
200% Modulus, psi	401	-	-
300% Modulus, psi	686	-	-
Specific Gravity	1.464	-	-

TEAR RESISTANCE, ASTM D 624, DIE B

Specimens tested at 20 in/min.

	<u>RESULTS</u>	<u>REQUIREMENTS</u>	<u>PASS/FAIL</u>
Tear Strength, pli	207	40 min.	Pass

HEAT-AGED PROPERTIES, ASTM D 573

Specimens aged 70 hrs. @ 392°F in a forced air oven.

	<u>RESULTS</u>	<u>REQUIREMENTS</u>	<u>PASS/FAIL</u>
Durometer, point change	+1	±10,-5	Pass
Tensile Strength, % change	-18.8	-30 max.	Pass
Elongation, % change	-11.6	-25 max.	Pass
Weight Change, %	-0.3	+2 max.	Pass

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COMPRESSION SET, ASTM D 395, METHOD B

Specimens aged at following conditions below, 25% deflection, ½ hr. recovery.

	<u>RESULTS</u>	<u>REQUIREMENTS</u>	<u>PASS/FAIL</u>
Compression Set, %			
22 hrs. @ 347°F	19.9	25 max.	Pass
70 hrs. @ 75°F	6.6	15 max.	Pass
70 hrs. @ 302°F in AMS 3021	31.3	35 max.	Pass

FLUID IMMERSION PROPERTIES, ASTM D 471

Specimens immersed at following conditions below:

22 hrs. @ 75°F – AMS2629 Type 1	<u>RESULTS</u>	<u>REQUIREMENTS</u>	<u>PASS/FAIL</u>
Durometer, point change	-9	-15 max.	Pass
Tensile Strength, % change	-26.2	-65 max.	Pass
Elongation, % change	-21.04	-60 max.	Pass
Volume Change, %	+23.2	+1 to +30	Pass

70 hrs. @ 302°F – AMS3021	<u>RESULTS</u>	<u>REQUIREMENTS</u>	<u>PASS/FAIL</u>
Durometer, point change	-6	±15	Pass
Tensile Strength, % change	-31.0	-45 max.	Pass
Elongation, % change	-20.9	-30 max.	Pass
Volume Change, %	+10.8	+1 to +15	Pass

LOW TEMPERATURE RETRACTION, ASTM D 1329

Specimens conditioned 10 min. @ -94°F to -100°F in methanol.

Initial Specimen Length: 2.0 inches


Initial Elongation Used: 250%

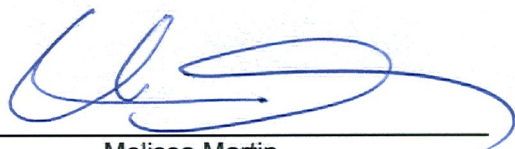
Rate of Coolant Rise: 1.8°F/min.

Temperature measured by thermocouple.

Median of three specimens reported.

	<u>RETRACTION TEMPERATURE, °F</u>	<u>REQUIREMENTS</u>	<u>PASS/FAIL</u>
TR10	-72	-70 or colder	Pass
TR30	-22		
TR50	-7		
TR70	-2		

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