

Akron Rubber Development Laboratory, Inc.



TEST CERTIFICATE

This document certifies Arlon® 1050

From

Greene, Tweed & Co.

PASSED

the technical requirements for Fluid Aging

In accordance with Annex B, ISO 23936-1, 2009 Edition and NORSOK M-710, Rev.3

Test Gas Classification	B.1.1 Table B.1 Multi-Phase High H ₂ S Sour Gas Aromatic Fluid Mix
Test Temperature	195°C, 210°C, and 225°C
Initial Charge Pressure	6.0 +/- 0.5 MPa (870 +/- 72 psi)
Test Specimen	ASTM D638 Type IV dumbbell test specimens
Operational Service Temperature / Classification	180°C / ISO 10423 Service Classification "X"

Prepared By: _____

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Staff Engineer
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Approved By: _____

John Meser
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An A2LA Accredited Testing Laboratory — Certificate Numbers 255.01 & 255.02
ISO 9001:2008 Registered

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Registered

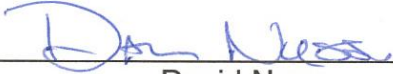
*Certificate Numbers 255.01 & 255.02

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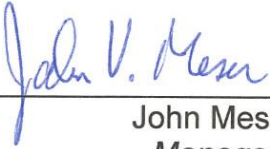
ARDL verifies that Arlon® 1050 ASTM D638 Type IV dumbbell test specimens, supplied by Greene, Tweed & Co., have been subjected to ISO 23936-1 Annex B and NORSOK M-710 Rev 3 test specifications with no failures during the 42 day aging test.

Property	Measured	Allowable Change	Source	Comment
% Change Volume min/max	+3.8%/+4.8%	-1%/+5%	ISO 23936-1 NORSOK M-710	No failures during aging test
Hardness min/max	+8.4/+17.2 (points)	Report	ISO 23936-1 NORSOK M-710	Data only to be reported
% Change Young's Modulus min/max	-14.1%/+11.8%	-50%/+50%	ISO 23936-1 NORSOK M-710	No failures during aging test
% Change Stress At Break min/max	-4.0%/+0.8%	-50%/+50%	ISO 23936-1 NORSOK M-710	No failures during aging test
% Change Elongation min/max	-6.5%/+15.7%	-50%/+50%	ISO 23936-1 NORSOK M-710	No failures during aging test

The results indicate that the material is resistant to the simulated fluid media specific herein. The Arlon® 1050 Plastic **PASSED** the full requirements of Annex B per ISO 23936-1 and Norsok M710 Rev 3, under the stated conditions.



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