

Akron Rubber Development Laboratory, Inc.



TEST CERTIFICATE

This document certifies Chemraz[®] 510 FFKM

From

Greene, Tweed & Co.

PASSED

the technical requirements for Fluid Aging

In accordance with Annex A, ISO 23936-2, 2011 Edition and NORSOK M-710, Rev.3

Test Gas Classification	A.5 (A.1.ii and A.3.ii) Multi-Phase High H ₂ S Sour Gas Aromatic Fluid Mix
Test Temperature	165°C, 180°C, and 195°C
Initial Charge Pressure	6.0 +/- 0.5 MPa (870 +/- 72 psi)
Test Specimen	Type 2 ISO 37 test specimens
Operational Service Temperature Classification	150°C

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An A2LA Accredited Testing Laboratory — Certificate Numbers 255.01 & 255.02
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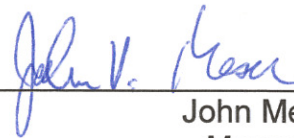
ARDL verifies that Chemraz® 510 FFKM Type 2 ISO 37 test specimens, supplied by Greene, Tweed & Co., have been subjected to ISO 23936-2 Annex A and NORSOK M-710 Rev 3 test specifications with no failures during the 42 day aging test.

Property	Measured	Allowable Change	Source	Comment
% Change Volume min/max	+2.6/+8.9%	-5/+25%	ISO, NORSOK	Within specification
Hardness min/max	79.8 to 89.6 -9.8 /+0.0points	+5/-20 Points	ISO, NORSOK	Within specification
% Change 50% Modulus min/max	-8.6/+16.2%	±50%	ISO, NORSOK	Within specification
% Change Peak Stress min/max	-10.1/+7.8%	±50%	ISO, NORSOK	Within specification
% Change Elongation min/max	-13.3/+13.2%	±50%	ISO, NORSOK	Within specification

The results indicate that the material is resistant to the simulated fluid media specific herein. The Chemraz® 510 FFKM Elastomer **PASSED** the full requirements of Annex A per ISO 23936-2 and Norsok M710 Rev 3, under the stated conditions.



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