



SCOPE OF ACCREDITATION TO ISO/IEC 17025:2017

AKRON RUBBER DEVELOPMENT LABORATORY, INC.
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MECHANICAL

Valid To: March 31, 2026

Certificate Number: 0255.03

In recognition of the successful completion of the A2LA evaluation process, accreditation is granted to this laboratory to perform the following tests on rubber, plastics, textiles, latex, condoms, adhesives, sealers and adhesive tapes:

SAMPLE PREPARATION AND MOLDING

<u>Test Method</u>	<u>Test</u>
ASTM D2229 (Sections 6 to 10.4)	Standard Test Method for Adhesion Between Steel Tire Cords and Rubber
ASTM D3182	Procedures for Mixing Standard Compounds and Preparing Standard Vulcanized Sheets
ASTM D3183	Rubber – Preparation of Pieces for Test Purposes from Products
ASTM D3767	Standard Practice for Rubber – Measurement of Dimensions

MISCELLANEOUS

<u>Test Method</u>	<u>Test</u>
ASTM D6147	Determination of Force Decay (Stress Relaxation) in Compression
ASTM F36	Compressibility and Recovery of Gasket Materials
ASTM F1112	Statics Testing of Tubeless Pneumatic Tires for Rate of Loss of Inflation Pressure
ISO 3384-1	Determination of Stress Relaxation in Compression

CONVEYOR BELTING, FLAT TYPE

<u>Test Method</u>	<u>Test</u>
ASTM D378 (Section 9.2.1)	Preparation of Cover Pieces
ASTM D378 (Section 12)	Breaking Strength Testing of Conveyor Belting
ASTM D378 (Section 12)	Modulus Testing of Conveyor Belting
ASTM D378 (Section 14)	Carcass Tear Test (Propagation Resistance)

CONVEYOR BELTING, FLAT TYPE (Continued)

ASTM D378 (Section 16)	Breaking Strength of Mechanical Fastenings (Static Testing Method)
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ELECTRICAL

<u>Test Method</u>	<u>Test</u>
ASTM D149	Dielectric Breakdown Voltage and Dielectric Strength of Solid Electrical Insulation Materials at Commercial Power Frequencies
ASTM D120 - Section 18	Rubber Insulating Gloves – Electrical Properties

FEA MODELING AND SUPPORT TESTING

<u>Test Method</u>	<u>Test</u>
ASTM D4014 (Except 8.2.3, 8.2.5 & 8.2.6)	Plain and Steel-Laminated Elastomeric Bearings for Bridges
ARDL 8106 (Except Compression Set, ASTM D395)	Finite Element Analysis Support Test
ARDL 8107	Life Prediction of Elastomeric Components or Materials

DYNAMIC TESTING

<u>Test Method</u>	<u>Test</u>
ASTM D4065	Plastics: Dynamic Mechanical Properties: Determination and Report of Procedures
ASTM D5992	Dynamic Testing of Vulcanized Rubber and Rubber-Like Materials Using Vibratory Methods
ISO 4664-1	Rubber, Vulcanized or Thermoplastic-Determination of Dynamic Properties
ASTM E1640	Standard for Assignment of the Glass Transition Temperature by Dynamic Mechanical Analysis

IMPACT

<u>Test Method</u>	<u>Test</u>
ASTM D3763	High Speed Puncture Properties of Plastics Using Load and Displacement Sensors
ASTM F1292	Impact Attenuation of Surfacing Materials Within the Use Zone of Playground Equipment

SALT SPRAY CORROSION

<u>Test Method</u>	<u>Test</u>
ASTM B117	Operating Salt Spray (Fog) Apparatus

HOSE TESTING

<u>Test Method</u>	<u>Test</u>
ASTM D380 (Section 14-17)	Rubber Hose for Automotive Air and Vacuum Brake Systems

CARBON ARC TESTING ¹

Cycles	Programmable light cycle, no spray	
	Programmable light cycle with spray	
	Programmable dark cycle, no spray	
	Programmable dark cycle with spray	
Spray	Specimen Spray (front of specimen) Rack Spray (Back of specimen)	
Rotation	Rotating Rack. Programmable to run at various speeds Standard speed: 1 RPM	
Black Panel Temperature	Programmable,	Ambient to 100°C
Relative Humidity	Programmable (Air Temperature Dependent}	10% to 95%
Filters (Glass)	Corex	
	Soda	
	No Filters	

Note: ASTM D750, ASTM D822, and ASTM G152 are run regularly

OIL AND GAS

ISO 23936-1	Petroleum, Petrochemical and Natural Gas Industries – Non-Metallic Materials in Contact With Media Related Oil and Gas Production – Thermoplastics
ISO 23936-2	Petroleum, Petrochemical and Natural Gas Industries – Non-Metallic Materials in Contact With Media Related Oil and Gas Production – Elastomers
NORSOK M-710	Qualification of Non-Metallic Materials and Manufacturers
API 6A Annex F Section 1.13.5.2	Immersion Testing

RHEOLOGY

<u>Test Method</u>	<u>Test</u>
ASTM D2084	Rubber Property – Vulcanization Using Oscillating Disk Cure Meter
ASTM D5289	Rubber Property – Vulcanization Using Rotorless Cure Meters

VISCOSITY

<u>Test Method</u>	<u>Test</u>
ASTM D1646	Rubber – Viscosity, Stress Relaxation, and Pre – Vulcanization Characteristics (Mooney Viscometer)

VOLATILE MATTER

<u>Test Method</u>	<u>Test</u>
ASTM D5668 Method A	Rubber from Synthetic Sources – Volatile Matter

DYNAMIC, STATIC & FATIGUE

<u>Test</u>	<u>Frequency (max)</u>	<u>Load (max)</u>	<u>Amplitude (max)</u>	<u>Temperature</u>
Dynamic Testing	0.001 to 1000 Hz	500 kN	±127 mm	(-60 to 175) °C
Per:	ASTM D5992* SAE J1085*			

<u>Test</u>	<u>Load (max)</u>	<u>Deflection (max)</u>	<u>Temperature</u>
Static Testing	500 kN	±127 mm	(-60 to 175) °C
Per:	ASTM D575*		

<u>Test</u>	<u>Load (max)</u>	<u>Deflection (max)</u>	<u>Temperature</u>
Fatigue Testing: Axial	500 kN	±127 mm	(-60 to 175) °C
Per:	SAE J1183*		

*Using customer generated test specifications based on the above parameters and testing technologies listed above.

The laboratory is accredited for the test methods listed above. The accredited test methods are used in determining compliance with the material specifications listed below; however, the inclusion of these material specifications on this Scope does not confer laboratory accreditation to the material specifications. Inclusion of these material specifications on this Scope also does not confer accreditation for every method embedded within the specification. Only the methods listed above on this Scope are accredited.



ASTM: C923, C1115, C1173, D378, D1056, D1248, D1414, D2000, D6878 / D6878M, E308, D751

DaimlerChrysler: MS-AG-81, MS-AR-20, MS-AR-23, MS-AR-24, MS-AR-26, MS-AR-30, MS-AR-80, MS-DC-16

Ford: ESF-M4D101-A, ESF-M4D423-A, WSK-M4D695-A Withdrawn,
WSS-M2D378-B1 Withdrawn, WSS-M2D379-B1 Withdrawn, WSS-M2D380-B1
Withdrawn, WSS-M2D381-B1 Withdrawn, WSS-M2D382-B1 Withdrawn

GM: GM6086M Withdrawn 2012, GM7001M Withdrawn 2011,
GMP.ABS.018R Withdrawn 2012, GMP.E/P.003 Withdrawn 2011,
GMP.E/P.029 Withdrawn 2010, GMP.E/P.071 Withdrawn 2011,
GMP.TES.012 Withdrawn 2013, GMP.EP.001 Withdrawn 2011,
GMP.PE.002 Withdrawn 2011, GMP.PE.003 Withdrawn 2011,
GMP.PE.004 Withdrawn 2011, GMP.PE.005 Withdrawn 2011,
GMP.PE.006 Withdrawn 2016, GMP.PE.007 Withdrawn 2011,
GM (*continued*): GMP.PE.009 Withdrawn 2011, GMN8423 Withdrawn,
GMN11106 Withdrawn 2010, GMW15473 Withdrawn 2015,
GMW17408

ISO: 4074-1

JIS: K 6301:1995 (Withdrawn 1996)

Underwriters Laboratory: UL746B (UL 94 Only)

¹ This scope meets the A2LA P112 *Flexible Scope Policy*



Accredited Laboratory

A2LA has accredited

AKRON RUBBER DEVELOPMENT LABORATORY, INC.

Barberton, OH

for technical competence in the field of

Mechanical Testing

This laboratory is accredited in accordance with the recognized International Standard ISO/IEC 17025:2017 *General requirements for the competence of testing and calibration laboratories*. This accreditation demonstrates technical competence for a defined scope and the operation of a laboratory quality management system (refer to joint ISO-ILAC-IAF Communiqué dated April 2017).



Presented this 5th day of June 2024.

A blue ink signature of Mr. Trace McInturff, written in a cursive style.

Mr. Trace McInturff, Vice President, Accreditation Services
For the Accreditation Council
Certificate Number 0255.03
Valid to March 31, 2026
Revised February 20, 2026

For the tests to which this accreditation applies, please refer to the laboratory's Mechanical Scope of Accreditation.