SCOPE OF ACCREDITATION TO ISO/IEC 17025:2017

AKRON RUBBER DEVELOPMENT LABORATORY, INC.
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MECHANICAL

Valid To: January 31, 2026 Certificate Number: 0255.01

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:

CONDITIONING

Test Method	Test
ASTM D618	Conditioning of Plastics for Testing
ASTM D832	Rubber Conditioning for Low Temperature Testing

ABRASION

Test Method	Test
ASTM C1353/C1353M	Abrasion Resistance of Dimension Stone Subjected to Foot Traffic Using a Rotary Platform Abraser
ASTM D1630	Rubber Property – Abrasion Resistance (Footwear Abrader)
ASTM D3389	Coated Fabrics Abrasion Resistance (Rotary Platform Abrader)
ASTM D4060	Abrasion Resistance Organic Coatings by the Taber Abraser
ASTM D5963	Rubber Properties – Abrasion Resistance (Rotary Drum Abrader)
BS ISO 4649	Rubber, Vulcanized or Thermoplastic – Determination of Abrasion Resistance using a Rotating Cylindrical Drum Device
DIN ISO 4649	Determination of Abrasion resistance using a rotating cylindrical drum device
ISO 4649	Determination of Abrasion resistance using a rotating cylindrical drum device
ASTM D3884	Standard Guide for Abrasion Resistance of Textile Fabrics (Rotary Platform, Double-Head Method)

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ELECTRICAL

Test Method	Test
ASTM D150	AC Loss Characteristics and Permittivity (Dielectric Constant of Solid Electrical Insulation
ASTM D257	DC Resistance or Conductance of Insulating Materials
ASTM D991	Volume Resistivity of Electrically Conductive and Antistatic Products

EXPOSURE TESTING

Test Method	Test
Accelerated Aging and Heat Resistance	
ASTM D454	Rubber – Deterioration by Heat and Air Pressure
ASTM D572	Rubber – Deterioration by Heat and Oxygen
ASTM D573	Rubber – Deterioration in an Air Oven
ASTM D865	Rubber – Deterioration by Heating in Air (Test Tube Enclosure)
ASTM D1055 – 2009 (Parts 15-16) (Withdrawn in 2014)	Accelerated Aging Tests
ASTM D3574 (Test J)	Flexible Cellular Materials – Slab, Bonded, and Molded Urethane Foams – Steam Autoclave Aging
ASTM D3574 (Test K)	Flexible Cellular Materials – Slab, Bonded, and Molded Urethane Foams – Dry Heat Aging
DIN 53 508	Accelerated Ageing of Rubber
ISO 188	Rubber, vulcanized or thermoplastic – Accelerated Ageing and Heat Resistance Tests
JIS K6257	Rubber, Vulcanized or Thermoplastic – Determination of Heat Ageing Properties
SAE J2236	Determining Continuous Upper Temperature Resistance of Elastomers

LOW TEMPERATURE

Test Method	Test
ASTM D746	Brittleness Temperature of Plastics and Elastomer by Impact
ASTM D1329	Evaluating Rubber Property – Retraction at Lower Temperatures (TR Test)
ASTM D2137	Rubber Property – Brittleness Point of Flexible Polymers and Coated Fabrics
ISO 812	Rubber, Vulcanized or Thermoplastic – Determination of Low Temperature Brittleness
JIS K6261-1	General Introduction and Guide: Determination of low temperature properties

LOW TEMPERATURE (*continued*)

Test Method	Test
JIS K6261-2	Low temperature Brittleness
JIS K6261-3	Low temperature stiffness
JIS K6261-4	Low temperature retraction

XENON CAPABILITIES [1]

Spray	Rack and Specimen Spray (Front and Back)	
Rotation	Rotating Rack (some chambers have adjustable speed	
Water cooled lamps	65000W for Ci4000 chambers 12,000W for Ci5000 chambers, 1 sun only	
Light Sensors	Narrow band (340 nm or 420 nm Broad band (300 – 400 nm)	
Irradiance Range	340 Nm light sensor	0.17 to 080 W/m^2
	420 Nm light sensor	0.56 to 2.20 W/m^2
	300-400 Nm light sensor	23 to 97
Rack Temperature Range	Black Panel Temperature (Light Cycles)	45^0C to 89^0C
	Black Standard Temperature (Light Cycles)	45^0C to 100^0C
	Black Panel Temperature (Dark Cycles)	45^0C to 89^0C
	Black Standard Temperature (Dark Cycles)	45^0C to 89^0C
Dry Bulb Temperature Range	Chamber Temperature (Light Cycle)	38^0C to 70^0C
	Chamber Temperature (Dark Cycle)	23^{0C} to 70^0C
Relative Humidity	Humidity (Light Cycles)	10% to 75%
	Humidity (Dark Cycles)	Up to 100%
Outer Filter	Boro Type S (Borosilcate)	
	Quartz	
	Soda Lime	
	CIRA Type S	
	CIRA Quartz	
Inner Filter	Boro Type S (Borosilcate)	
	Quartz	
	Right Light	
	CIRA	
Special Auxiliary Lantern	Float Glass	
	Long Pass filter	

Note: Xenon Capabilities will vary with Filter Combinations and Irradiance Levels
Note: ASTM G155, ASTM G26, ASTM G151, & ASTM G153 listed regularly in Xenon standards
Note: SAE J2527 is high volume method

QUV CAPABILITIES [1]

Spray	Chambers have spray cycles programmed	
Cycles	Light, Condensation, and Dark	
Light sensors	340 nm 310 nm (UVB-313 lamps only	
Irradiance	UVA 340/UVA 340+ lamps	0.20 to 1.85 W/m^2
	UVA 351 Lamps	0.20 to 1.55 W/m^2
	UVB-313EL lamps	0.20 to 1.23 W/m^2
Uninsulated Black Panel Temperature Range	Light Cycles	35^{0}C to 80^{0}C
	Condensation/Dark Cycles	40^{0}C to 60^{0}C

Note: ASTM G151 & ASTM G154 listed regularly in QUV standards

ADHESION

Test Method	Test
AFG-01 - 1984	Adhesive for Field-Gluing Plywood to Wood Framing
ASTM D903	Peel or Stripping Strength of Adhesive Bonds
ASTM D2229 (Sections 10.5 to 12)	Standard Test Method for Adhesion Between Steel Tire Cords and Rubber
ASTM D3359	Measuring Adhesion by Tape Test
ASTM D3498	Adhesives for Field-Gluing Plywood to Lumber Framing for Floor Systems

CHEMICAL RESISTANCE

Test Method	Test
ASTM D471	Rubber Property – Effect of Liquids
ASTM D543	Evaluating the Resistance of Plastics to Chemical Reagents
ASTM D6284	Rubber Property – Effect of Aqueous Solutions with Available Chlorine and Chloramine
DIN 53 521 – 1987 (Withdrawn in 1999)	Determination of the Behavior of Rubber and Elastomers when Exposed to Fluids And Vapours
DIN ISO 1817	Determination of the effect of liquids
JIS K6258	Rubber, Vulcanized or Thermoplastic – Determination of the Effect of Liquids
ISO 1817	Rubber, Vulcanized or Thermoplastic – Determination of the Effect of Liquids
ASTM F146	Fluid Resistance of Gasket Material
GMW14334	Chemical Resistance to Fluids
NES M0133 2010	Testing methods of chemical resistance for plastic parts

COLOR

Test Method	Test
AATCC EP-1	Grey Scale for Color Change
ASTM D1003 Method B	Haze and Luminous Transmittance of Transparent Plastics
ASTM D2244	Calculation of Color Tolerances and Color Differences from Instrumentally Measured Color Coordinates
ASTM E313	Calculating Yellowness and Whiteness Indices from Instrumentally Measured Color Coordinates
ASTM E1164	Obtaining Spectrometric Data for Object-Color Evaluation
ASTM E1331	Reflectance Factor and Color by Spectrophotometry Using a Hemispherical Geometry
ISO 105-A02	Grey Scale for Assessing Change in Colour
ISO 105-A04	Method for the Instrumental Assessment of the Degree of Staining of Adjacent Fabrics
SAE J1545	Instrumental Color Difference Measurement for Exterior Finishes, Textiles and Colored Trim

COMPRESSION

Test Method	Test
ASTM D395	Compression Set
ASTM D575	Rubber Properties in Compression
ASTM D623 Method A only	Heat Generation and Flexing Fatigue in Compression
ASTM D695	Compressive Properties of Rigid Plastics
ASTM D790	Flexural Properties of Unreinforced and Reinforced Plastics and Electrical Insulating Materials
ASTM D945	Rubber Properties in Compression or Shear (Mechanical Oscillograph)
ASTM D1055 (17-19) – 2009 (Withdrawn in 2014)	Compression Set Under Constant Deflection
ASTM D1055 (27-30) – 2009 (Withdrawn in 2014)	Low-Temperature Test (Compression/Deflection)
ASTM D1229	Compression Set at Low Temperatures
ASTM D3574 (Test C)	Compression Force Deflection Test
ASTM D3574 (Test D)	Constant Deflection Compression Set
ASTM D3575 (Section 9-16)	Flexible Cellular Materials Made from Olefin Polymers – Compression Set Under Constant Deflection
ASTM D3575 (Section 17-24)	Flexible Cellular Materials Made from Olefin Polymers – Compression Deflection
ASTM F1342 (Procedure A)	Protective Clothing Material Resistance to Puncture
ISO 178 Type I, II, III	Determination of Flexural Properties
ISO 815-1	Determination of Compression Set – at Ambient or Elevated Temperatures
ISO 815-2	Determination of Compression Set – at Low Temperatures
ISO 1653 - 1975 (Withdrawn in 1993)	Vulcanized Rubbers - Determination of Compression Set under Constant Deflection at Low Temperatures
ISO 3386-1	Determination of stress strain characteristics in compression-Low density materials
DIN EN ISO 3386-1	Determination of stress strain characteristics in compression-Low density materials
JIS K6262	Rubber, Vulcanized or Thermoplastic – Determination of Compression Set at Ambient, Elevated or Low Temperatures
ASTM D4014	Shear Modulus and Related Testing for Elastomeric Bridge Bearings
ASTM D1667 (Parts 16-20)	Compression Deflection Test Method
ASTM D1667 (Parts 21-25)	Compression Set Under Constant Deflection

CONDOM TEST (Except Burst Testing)

Test Method	Test
ASTM D3492	Rubber Contraceptives (Male Condoms)
ISO 4074 Except annex G, K, and section M.3	Natural Rubber Latex Male Condoms – Requirements and Test Methods
BS EN ISO 4074 Except annex G and section M.3	Natural Rubber Latex Male Condoms – Requirements and Test Methods

CORROSION EVALUATION

SAE J1389	Corrosion Test for Insulation Materials

CRACK RESISTANCE

Test Method	Test
ASTM D813	Rubber Deterioration – Crack Growth
ASTM D1693	Environmental Stress – Cracking of Ethylene Plastics

DIMENSIONAL STABILITY

Test Method	Test
ASTM D1204	Linear Dimensional Changes of Nonrigid Thermoplastic Sheeting or Film at Elevated Temperatures
ASTM D3575 – Suffix S (Sections 35-42)	Flexible Cellular Materials Made from Olefin Polymers – Thermal Stability
ASTM D3767	Rubber Properties – Measurement of Dimensions

DENSITY

Test Method	Test
ASTM D792	Density and Specific Gravity of Plastics by Displacement
ISO 1183-1 Method A	Plastics – Methods for Determining the Density of Non-Cellular Plastics
ASTM D1667, X3	Suggested Test Method for Density (Suffix W)
ASTM D1622	Standard Test method for Apparent Density of Rigid Cellular Plastics
ASTM D3574 (Test A)	Density Test Urethane Foams
ASTM D3575 (Suffix W, Procedure A)	Density – Flexible Cellular Materials Made from Olefin Polymers

EXTENSION CYCLING FATIGUE/CUT GROWTH

Test Method	Test
ASTM D430	Rubber Deterioration – Dynamic Fatigue
ASTM D1052	Measuring Rubber Deterioration – Cut Growth Using Ross Flexing Apparatus
ASTM D4482	Rubber Property – Extension Cycling Fatigue

FLAMMABILITY

Test Method	Test
ASTM C1166	Flame Propagation of Dense and Cellular Elastomeric Gaskets and Accessories
ASTM D635	Rate of Burning and/or Extent and Time of Burning of Plastics in a Horizontal Position
ASTM D3801	Measuring the Comparative Burning Characteristics of Solid Plastics in a Vertical Position
ASTM D5132	Horizontal Burning Rate of Polymeric Materials Used in Occupant Compartments of Motor Vehicles
USDOT FMVSS-302-03	Flammability of Interior Materials – Passenger Cars, Multipurpose Passenger Vehicles, Trucks and Buses
IEC 60695-11-10	50W Horizontal and Vertical Flame Test Methods
ISO 3795	Determination of Burning Behavior of Interior Materials
SAE J369	Flammability of Polymeric Interior Materials – Horizontal Test Method
UL94 (except sections 9,10,11 and 12)	Flammability of Plastic Materials for Parts in Devices and Appliances
VW TL1010-2008	Burning Behavior – Materials used in Vehicle Interiors

FOGGING CHARACTERISTICS

Test Method	Test
Chrysler LP-463DB-12-01 – 2000 Withdrawn	Fogging Resistance of Interior Materials
GMW 3235	Fogging Characteristics of Trim Materials
SAE J1756	Determination of the Fogging Characteristics of Interior Automotive Materials

FRICTION PROPERTIES

Test Method	Test
ASTM D1894	Static and Kinetic Coefficients of Friction of Plastic Film and Sheeting

GLOSS (20°/60°/85°)

Test Method	Test
ASTM D523	Specular Gloss
ASTM D4039	Reflection Haze of High-Gloss Surfaces
Federal Standard 141D (Methods 6101.1, 6103 &6104 only)	60°, 85°, 20° Specular Gloss
Ford FLTM BI 110-01	Measurement of the Gloss of Paint Panels
Honda HES D2500-10 (Section 3.10 only)	Gloss Test
ISO 2813	Gloss values at 20°, 60°, 85°

GLOVE TESTING

Test Method	Test
ASTM D120	Rubber Insulating Gloves
ASTM D3577	Rubber Surgical Gloves
ASTM D3578	Rubber Examination Gloves
ASTM D5151	Detection of Holes in Medical Gloves
ASTM D5250	Poly (Vinyl Chloride) Gloves for Medical Application
ASTM D6124	Residual Powder on Medical Gloves
ASTM D6319	Nitrile Examination Gloves for Medical Application (except Section 7.2)
BS EN 455-1	Medical Gloves for Single Use – Requirements and Testing for Freedom from Holes
BS EN 455-2	Medical Gloves for Single Use – Requirements and Testing for Physical Properties
BS EN ISO 374-2	Determination of Resistance to Penetration

HARDNESS

Test Method	Test
ASTM D2240 (Types A, D, M, and OO)	Rubber Property – Durometer Hardness
DIN 53 505-2000 (Withdrawn in 2012)	Shore A and Shore D Hardness Testing of Rubber
ISO 868 (Types A and D)	Plastics and Ebonite – Determination of Indentation Hardness by Means of a Durometer (Shore Hardness)
DIN ISO7619-1	Rubber, Vulcanized or Thermoplastic-Determination of Indentation Hardness
JIS K 6253-2 M and CM only	Rubber, Vulcanized or Thermoplastic – Determination of Hardness (Hardness Between 10 IRHD and 100 IRHD)
ASTM D1415	Rubber Property – International Hardness
ISO 48-2 M, N and CM only (Withdrawn)	Rubber, Vulcanized or Thermoplastic – Determination of Hardness (Hardness between 10 IRHD and 100 IRHD)
ASTM D785 (Scale R)	Rockwell Hardness of Plastics and Electrical Insulating Materials

HDT/VICAT SOFTENING POINT

Test Method	Test
ASTM D648 (Method A)	Deflection Temperature of Plastics Under Flexural Load in the Edgewise Position
ASTM D1525 (Rate B)	Vicat Softening Temperature of Plastics
ISO 75-1	Determination of Temperature of Deflection under Load – General Test Method
ISO 75-2	Determination of Temperature of Deflection under Load – Plastics and Ebonite
ISO 75-3	Determination of Temperature of Deflection under Load – High-Strength Thermosetting Laminates and Long-Fibre-Reinforced Plastics
ISO 306 (Method A120)	Determination of Vicat Softening Temperature

HOSE TESTING

Test Method	Test
ASTM D380 (Except 14-17)	Standard Test Method for Rubber Hoses
ASTM D622 *Except Sections 7 & 11*	Rubber Hose for Automotive Air and Vacuum Brake Systems
SAE J1037 *Except Section 4.3*	Windshield Washer Tubing

IMPACT

Test Method	Test
ASTM D256 (Method A)	Determining the Izod Pendulum Impact Resistance of Plastics
ASTM D4812	Unnotched Cantilever Beam Impact Resistance of Plastics
ASTM D5420	Impact Resistance of Flat, Rigid Plastic Specimen by Means of a Striker Impacted by a Falling Hammer (Gardner Impact)
ISO 179-1	Determination of Charpy Impact Properties
ISO 180	Determination of Izod Impact Strength

INJECTION MOLDING TEST SPECIMENS

Test Method	Test
ASTM D3641	Injection Molding Test Specimens of Thermoplastics Molding and Extrusion Materials

MELT FLOW

Test Method	Test
ASTM D1238 (Procedures A, B & D)	Melt Flow Rates of Thermoplastics by Extrusion Plastometer
ISO 1133-1	Determination of the Melt Mass Flow Rate (MFR) and Melt Volume-Flow Rate (MVR) of Thermoplastics

ODOR TESTING

Test Method	Test
GMW 3205	Determining the Resistance to Odor Propagation of Interior Materials
SAE J1351	Hot Odor Test for Insulation Materials
VDA 270	Determination of odor characteristics of trim materials

OZONE TESTING

Test Method	Test
ASTM D518-99 (Withdrawn in 2008)	Rubber Deterioration – Surface Cracking
ASTM D1149	Rubber Deterioration – Cracking in an Ozone Controlled Environment
ASTM D1171	Rubber Deterioration – Surface Ozone Cracking Outdoors or Chamber (Triangular Specimens)
ASTM D3395-99 (Withdrawn in 2008)	Rubber Deterioration – Dynamic Ozone Cracking in a Chamber
DIN 53 509-1-1990 (Withdrawn in 2011)	Resistance of rubber to ozone cracking
ISO 1431-1	Rubber, Vulcanized or Thermoplastic – Resistance to Ozone Cracking – Static and Dynamic Strain Testing
Ford BP 101-01	Degradation by ozone
FMVSS 106 TP-106 April 2008 (sections 12.A.13 & 12.B.6)	Laboratory test procedure for FMVSS 106 brake hoses
GM4486P-1995(Withdrawn 2011)	Test for Ozone Resistance of Elastomer Compounds

RESILIENCE BY REBOUND

Test Method	Test
ASTM D2632	Rubber Property – Resilience by Vertical Rebound
ASTM D7121	Rubber Property – Resilience Using Schob Type Rebound Pendulum
DIN 53 512	Rubber, Vulcanized or Thermoplastic – Determination of Rebound Resilience
ISO 4662 (Pendulum Method)	Determining the Rebound Resilience of Rubber using the Schob Pendulum

SPONGE PROPERTIES

Test Method	Test
ASTM D1056 (Sections 16-22)	Compression-Deflection
ASTM D1056 (Sections 23-26)	Oil Immersion
ASTM D1056 (Sections 27-34)	Fluid Immersion
ASTM D1056 (Sections 35-42)	Compression-Deflection Change after Oven Aging
ASTM D1056 (Sections 43-49)	Water Absorption Test
ASTM D1056 (Sections 50-56)	Compression Set Under Constant Deflection
ASTM D1056 (Sections 57-61)	Low Temperature Flex Test
ASTM D1056 (Sections 62-68)	Density (Suffix W)

STAIN RESISTANCE

Test Method	Test
AATCC Evaluation Procedure 2	Grey Scale for Staining
ASTM D925	Rubber Property – Staining of Surfaces (Contact and Migration)
BN 103-01	Resistance of Coated Fabrics and Plastic Film to Migration Staining and Blocking
ISO 3865	Rubber, Vulcanized or Thermoplastic – Methods for Staining in Contact with Organic Materials
Nissan NES M0142-1991 (Section 18 & 19)	Staining/Indirect Staining

STIFFNESS

Test Method	Test
ASTM D1053	Rubber Property – Stiffening at Low Temperatures: Flexible Polymers and Coated Fabrics (Torsional Stiffness)

TENSILE TESTS

Test Method	Test
ASTM D412 (Method A)	Vulcanized Rubber and Thermoplastic Elastomers – Tension
ASTM D413	Rubber Property – Adhesion to Flexible Substrate
ASTM D429	Rubber Property – Adhesion to Rigid Substrates
ASTM D624	Tear Strength of Conventional Vulcanized Rubber and Thermoplastic Elastomers
ASTM D638	Tensile Properties of Plastics
ASTM D882	Tensile Properties of Thin Plastic Sheeting
ASTM D1002	Shear Strength of Single-Lap-Joint Adhesively Bonded Metal Specimens by Tension Loading (Metal-to-Metal)
ASTM D1004	Tear Resistance (Graves Tear) of Plastic Film and Sheeting
ASTM D1708	Tensile Properties of Plastics by Use of Microtensile Specimens
~~ASTM D3163~~	~~Determining Strength of Adhesively Bonded Rigid Plastic Lap-Shear in Shear by Tension Loading~~
ASTM D3574 (Test E)	Flexible Cellular Materials – Slab, Bonded, and Molded Urethane Foams – Tensile Test
ASTM D3574 (Test F)	Flexible Cellular Materials – Slab, Bonded, and Molded Urethane Foams – Tear Test
ASTM F152	Tension Testing of Nonmetallic Gasket Materials
DIN 53 504	Determination of Tensile Strength

TENSILE TESTS (*continued*)

Test Method	Test
ISO 34-1	Rubber, vulcanized or thermoplastic – Determination of Tear Strength – Trouser, Angle and Crescent Test Pieces
ISO 34-2	Rubber, Vulcanized or Thermoplastic – Determination of Tear Strength – Small (Delft) Test Pieces
ISO 37	Rubber, Vulcanized or Thermoplastic – Determination of Tensile Stress-Strain Properties
ISO 527-1	Plastics – Determination of Tensile Properties
ISO 6383-1	Film and Sheeting – Determination of Tear Resistance – Trouser Tear Method
JIS K 6251	Rubber, Vulcanized or Thermoplastic – Determination of Tear Strength
JIS K6252-1	Rubber, Vulcanized or Thermoplastic- Determination of tear strength Trouser, angle crescent pieces
JIS K6252-2	Rubber, Vulcanized or Thermoplastic- Determination of tear strength Small (delft) test pieces
JIS K6252-2007 (Withdrawn)	Rubber, Vulcanized or Thermoplastic – Determination of Tensile Stress-Strain Properties
DIN 53 507 – 1983 (Withdrawn)	Determination of Tear Growth Propagation Trouser Test Piece
ASTM D3137	Standard Test Method for Rubber Property- Hydrolytic Stability

LOW TEMPERATURE BENDING

Test Method	Test
ASTM D2136	Coated Fabrics – Low Temperature Bending Test

VAPOR TRANSMISSION OF VOLATILE LIQUIDS

Test Method	Test
ASTM D814	Rubber Property – Vapor Transmission of Volatile Liquids

VOLATILE LOSS

Test Method	Test
ASTM D1203	Volatile Loss of Plastics Using Activated-Carbon Method

WATER ABSORPTION

Test Method	Test
ASTM D570	Water Absorption of Plastics
ASTM D3575 – Suffix L (Sections 26-32)	Flexible Cellular Materials Made from Olefin Polymers – Water Absorption
ISO 62	Plastics – Determination of Water Absorption
BS EN ISO 62	Plastics – Determination of Water Absorption
ISO 6916-1 Annex E	Flexible cellular polymeric materials-Sponge and expanded cellular rubber

CONVEYOR BELTING, FLAT TYPE

Test Method	Test
ASTM D378 (Section 9.2.2 to 9.5)	Preparation of test specimen and tensile, Elongation, hardness and test testing
ASTM D378 (Section 9.6)	Procedure for Physical properties of Elastomeric covers after Heat Aging
ASTM D378 (Section 9.7)	Coefficients of Friction, Static and Kinetic
ASTM D378 (Section 9.8)	Abrasion Resistance
ASTM D378 (Section 9.9)	Ozone Resistance
ASTM D378 (Section 9.10)	Electrical Surface Resistance
ASTM D378 (Section 10)	Immersion Tests
ASTM D378 (Section 11)	Adhesion Tests

O-RING TESTING

Test Method	Test
ASTM D1414 (Section 7)	Dimensional Measurement
ASTM D1414 (Section 8)	Tension Testing
ASTM D1414 (Sections 10 & 11)	Compression Set Testing
ASTM D1414 (Section 12)	Low Temperature Retraction
ASTM D1414 (Section 13)	Relative Density
ASTM D1414 (Section 14)	Immersion Testing
ASTM D1414 (Section 15)	Heat Aging
ASTM D1414 (Section 16)	Hardness Testing

*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-B1Withdrawn, WSS-M2D379-B1 Withdrawn, WSS-M2D380-B1 Withdrawn, WSS-M2D381-B1 Withdrawn, WSS-M2D382-B1Withdrawn

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, GMP.PE.009 Withdrawn 2011, GMN8423Withdrawn, 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.

Akron, 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.

Mr. Trace McInturff, Vice President, Accreditation Services
For the Accreditation Council
Certificate Number 0255.01
Valid to January 31, 2026

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