



SCOPE OF ACCREDITATION TO ISO/IEC 17025:2017

SMITHERS
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MECHANICAL

Valid To: May 31, 2024

Certificate Number: 0363.02

In recognition of the successful completion of the A2LA evaluation process, accreditation is granted to this laboratory to perform the following types of tests on adhesives, sealants, plastics, polymers, natural rubber, latex and rubber products:

<u>Test:</u>	<u>Test Method(s):</u>
Tensile, Elongation, Modulus	ASTM D412, D378, D638; ISO 37; DIN 53504
Tear Resistance	ASTM D378, D624; ISO 34-1, 34-2
Compression Set	ASTM D395; ISO 6505, 815-1
Properties of Rubber in Compression	ASTM D575
Durometer Hardness, Shore A, D & M	ASTM D2240
IRHD	ASTM D1415; ISO 48, 3387
<u>Flex Fatigue</u>	
Dynamic Fatigue	ASTM D430 Method B
Crack Growth	ASTM D813
Cut Growth	ASTM D1052
Monsanto Flex Extension Cycling Fatigue	ASTM D4482
Adhesion Strength	ASTM D413 Machine Method, D429 Methods A & B
Adhesion Between Steel Tire Cords and Rubber	ASTM D2229, D885
Low Temperature Brittleness	ASTM D746; ISO 812
Brittleness Point of Flexible Polymers	ASTM D2137
Low Temperature Retraction	ASTM D1329, ISO 2921

Test:

Low Temperature Bend Test, Coated Fabrics
Stiffening at Low Temperatures, Gehman

Environmental Simulation

High Temperature

Ozone Resistance

Dynamic Ozone Cracking in a Chamber

Air Oxygen Bomb

Fluid Aging

Salt Spray

Humidity

Flexural Properties

Specific Gravity/Density

Medical Glove Hole Detection

O-Ring Testing, Tensile

Water Absorption of Plastics

Dynamic Testing, Flexometer

Effect of Household Chemicals

Adhesion by Tape Test

Abrasion Resistance (Rotary Drum)

Rubber Process Analyzer (RPA)²

Tensile Green Strength of Unvulcanized Rubber

Mooney Viscosity

Rheometer (ODR)

Staining of Surfaces

Test Method(s):

ASTM D2136

ASTM D1053 Method A; ISO 1432

ASTM D573, D865; ISO 188

ASTM D518-99 (Withdrawn 2008)¹, D1149
(Except Method A Procedure A2 and Method B
Procedure B3), D1171; ISO 1431-1, 6722-1
(Section 5.19), 7840 (Section 5.8), 19642-2
(Sections 5.4.14 & 6.4.12); SAE J1128 (Section
6.8), J1206

ASTM D3395-99 Method A (Withdrawn 2007)¹

ASTM D454, D572

ASTM D471; ISO 1817

ASTM B117; ABNT NBR 6752

ASTM D1735

ASTM D790

ASTM D792, D1475, D297; ISO 1183, 2781

ASTM D5151

ASTM D1414 (Section 8)

ASTM D570

ASTM D623 Method A

ASTM D1308

ASTM D3359; ABNT NBR 11003

ASTM D5963

ASTM D5289, D5992, D6048, D6204, D6601,
D7050, D7605, D8059

ASTM D6746, D3182

ASTM D1646

ASTM D2084

ASTM D925



<u>Test:</u>	<u>Test Method(s):</u>
BFG Cut & Chip	MT 2051.01
Resilience by Vertical Rebound, Bashore	ASTM D2632
Impact Resistance, Izod Pendulum	ASTM D256
Volume Resistivity	ASTM D991
Static and Kinetic Coefficients of Friction	ASTM D1894
DC Resistance or Conductance of Insulating Materials, Surface	ASTM D257
Heat and UV Light Discoloration of Light Colored Surfaces	ASTM D1148
Fluorescent UV Exposure of Plastics, QUV	ASTM D4329
Fluorescent Light Apparatus for UV Exposure	ASTM G154
Xenon Arc Light Apparatus for Exposure on Non-Metallic Materials	ASTM G155
Melt Flow Rates of Thermoplastics by Extrusion Plastometer	ASTM D1238 Method A; ISO 1133
Abrasion Resistance by the Pico Abrader Method	ASTM D2228
Abrasion Resistance Coated Fabrics, Taber	ASTM D3389
Compressive Properties of Rigid Plastics	ASTM D695
Dielectric Strength, AC	ASTM D149
Compression Stress Relaxation	ASTM D6147; ISO 3384
Flammability	FMVSS 302; ASTM C1166; UL 94
Floating Roller Peel Resistance of Adhesives	ASTM D3167
Tensile Green Strength of Unvulcanized Rubber	ASTM D6746, D3182
Tensile Properties of Thin Plastic Films	ASTM D882
Tear Propagation Resistance of Plastic Film and Thin Sheeting	ASTM D1938
Resistance of Plastics to Chemical Reagents	ASTM D543 Method A
Viscoelastic Properties ² DMTA (Dynamic Mechanical Thermal Analysis) (0.0005-35 N; 0.01-100 Hz; -150-600 °C; 0.1-60 °C/min; +/- 0.1 °C)	ASTM E1640; Ford TM-04.04-E4335



Test:

Test Method(s):

Conditioning of Plastics for Testing

ASTM D618

Rubbers – Standard Temperatures for Testing

ASTM D1349

¹This laboratory's scope contains withdrawn or superseded methods. As a clarifier, this indicates that the applicable method itself has been withdrawn or is now considered "historical" and not that the laboratory's accreditation for the method has been withdrawn

²This laboratory also uses proprietary, customer supplied, or other commercial or industry test methods similar to this standard test, but do not reference this or other standard tests.



Accredited Laboratory

A2LA has accredited

SMITHERS

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 30th day of May 2022.

A blue ink signature of the Vice President of Accreditation Services.

Vice President, Accreditation Services
For the Accreditation Council
Certificate Number 0363.02
Valid to May 31, 2024
Revised March 18, 2024

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