



SCOPE OF ACCREDITATION TO ISO/IEC 17025:2005

SMITHERS RAPRA, INC.
425 West Market Street
Akron, OH 44303-2088
Kenny McGinnis Phone: 330 762 7441

MECHANICAL

Valid To: March 31, 2012

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 tests on adhesives, sealants, plastics, polymers, natural rubber, latex and rubber products:

<u>Test Name</u>	<u>Test Method(s)</u>
Tensile, Elongation, Modulus	ASTM D412, D638; ISO 37
Tear Resistance	ASTM D624; ISO 34-1, ISO 34-2
Compression Set	ASTM D395; ISO 6505, ISO 815-1
Durometer Hardness, Shore A & D	ASTM D2240
IRHD	ASTM D1415; ISO 48, ISO 3387
Flex Fatigue:	
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 Method A & B
Adhesion between Steel Tire Cords and Rubber	ASTM D2229
Low Temperature Brittleness	ASTM D746; ISO 812
Properties of Rubber in Compression	ASTM D575

Test Name

Test Method(s)

Environmental Simulation:

High Temperature	ASTM D573, D865; ISO 188
Ozone Resistance	ASTM D518, D1149; ISO 1431-1, ISO 6722 (Section 11.4); SAE J1128 (Section 6.8)
Air Oxygen Bomb	ASTM D454, D572
Fluid Aging	ASTM D471; ISO 1817
Salt Spray and Humidity	ASTM B117
Flexural Properties	ASTM D790
Plasticity Retention Index	ASTM D3194
Specific Gravity/Density	ASTM D792; ISO 1183, ISO 2781
Rheometer (ODR)	ASTM D2084
Mooney Viscosity	ASTM D1646
Medical Glove Hole Detection	ASTM D5151
Low Temperature Retraction	ASTM D1329
O-Ring Testing, Tensile	ASTM D1414 Section 8
Water Absorption of Plastics	ASTM D570
Deterioration:	
Surface, Ozone, Cracking	ASTM D1171
Dynamic Testing	ASTM D623 Method A, E1640, D5992
Brittleness Point of Flexible Polymers	ASTM D2137
Filiform Corrosion Resistance	ASTM D2803
Effect of Household Chemicals	ASTM D1308
Chipping Resistance of Coatings	ASTM D3170
Adhesion by Tape Test	ASTM D3359
Specular Gloss	ASTM D523 (60 deg Only)
Abrasion Resistance (Rotary Drum)	ASTM D5963



<u>Test Name</u>	<u>Test Method(s)</u>
Rubber Process Analyzer (RPA)	ASTM D5289, D6204, D6601
Staining of Surfaces	ASTM D925
BFG Cut & Chip	MT 2051.01
Resilience by Vertical Rebound, Bashore	ASTM D2632
Impact Resistance, Izod Pendulum	ASTM D256
Static and Kinetic Coefficients of Friction,	ASTM D1894
Volume Resistivity of Electrically Conductive Products	ASTM D991
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
Melt Flow Rates of Thermoplastics by Extrusion Plastometer	ASTM D1238; ISO 1133
Abrasion Resistance by the Pico Abrader Method	ASTM D2228
Abrasion Resistance Coated Fabrics, Taber	ASTM D3389
Stiffening at Low Temperatures, Gehman	ASTM D1053; ISO 1432
Compressive Properties of Rigid Plastics	ASTM D695
Dielectric Strength, AC	ASTM D149
Low Temperature Bend Test, Coated Fabrics	ASTM D2136
Compression Stress Relaxation	ASTM D6147; ISO 3384
Flammability	FMVSS 302
Dynamic Ozone Cracking in a Chamber	ASTM D3395 Method A
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



<u>Test Name</u>	<u>Test Method(s)</u>
Tear Propagation Resistance of Plastic Film & Thin Sheeting	ASTM D1938
Resistance of Plastics of Chemical Reagents	ASTM D543 Method A
Brinell Hardness	ASTM E10
Rockwell Hardness, B, C, M, R, Scales	ASTM E18
Metallographic Sample Preparation	ASTM E3
Macroetching Metals and Alloys	ASTM E340
Microetching Metals and Alloys	ASTM E407
Inclusions in Steel	SAE J422
Determining Grain Size in Metals	ASTM E112
Decarburization Depth in Steel	ASTM E1077 except sec. 7.5
Microindentation Hardness	ASTM E384
Viscoelastic Properties DMTA (Dynamic Mechanical Thermal Analysis)	ASTM E1640
Conditioning of Plastics for Testing	ASTM D618
Rubbers – Standard Temperatures for Testing	ASTM D1349





The American Association for Laboratory Accreditation

World Class Accreditation

Accredited Laboratory

A2LA has accredited

SMITHERS RAPRA, 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 17025:2005 *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 8 January 2009*).

Presented this 10th day of May 2010.





Peter Abney

President & CEO
For the Accreditation Council
Certificate Number 0363.02
Valid to March 31, 2012
Revised December 3, 2010

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