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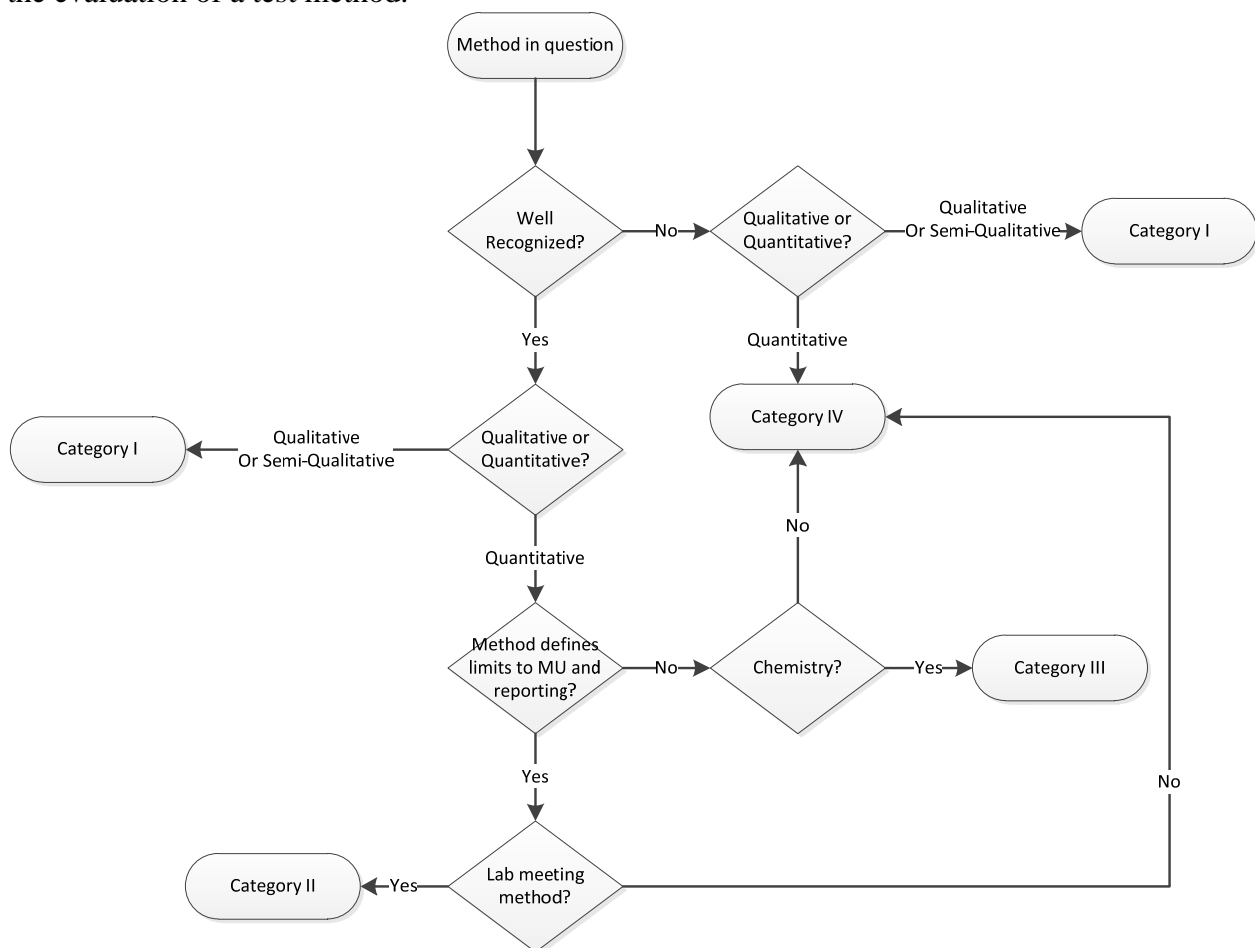
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During the past year, A2LA has compiled information regarding the classification of common test methods according to the A2LA Policy on Measurement Uncertainty for Testing Laboratories. Following is a list of example classifications, which has been reviewed by the A2LA Materials Testing Technical Advisory Committee.

A laboratory shall have a procedure for the determination of uncertainty for test methods regardless of its applicability. For tests covered under ISO/IEC 17025, Note 2 of 5.4.6.2, as well as for qualitative test results, assessing the capability of the laboratory to evaluate measurement uncertainty of those test results is not required. The following decision tree provides criteria for the evaluation of a test method.



It is imperative to note that the A2LA Policy is intended as a means to facilitate transition to compliance with ISO/IEC 17025, and is subject to change, as additional guidance is made available internationally. In addition, the list below is intended to provide examples of how the listed methods were typically categorized. **These classifications are dependent on the particular circumstances in a laboratory, and may not apply in all cases.** The fact that a method is listed below in Category I or II does not absolve a laboratory from compliance with 5.4.6.2 of ISO/IEC 17025 or the need to address measurement uncertainty.

The list is organized by test type or test material. Following is a list of the test areas currently covered:

Testing Methods are organized by Test Type or Material:

<u>Test Type:</u>	<u>Test Material:</u>
Chemical	Coatings
Environmental	General Automotive
Mechanical	Geosynthetic
Nondestructive	Metals
Optical	Plastics and Rubber
Thermal	Textiles

* A searchable list created in Excel is also available on the A2LA website

Test Method	Standard(s)	Category (I through V)	Test Grouping
Chlorine, Bromine, or Iodine in Organic Compounds by Oxygen Flask Combustion	ASTM E442 (Withdrawn 1997)	II	Chemical
Dynamic Perforation Test (cone drop test)	ISO EN 918	II	Chemical
Gas Chromatography	ASTM E260	I	Chemical
Glass Transition Temperature by DSC	ASTM E1356	II	Chemical
High Performance Liquid Chromatography (HPLC)	ASTM D5296	II	Chemical
Infrared Microanalysis	ASTM E334	I	Chemical
Internal Reflection Spectroscopy	ASTM E573	I	Chemical
Leaching for Halides and Sulfur	ASTM D1179	II	Chemical
Leaching for Halides and Sulfur	ASTM D1246	II	Chemical
Leaching for Halides and Sulfur	ASTM D512	II	Chemical
Obtaining Infrared Spectra for Qualitative Analysis	ASTM E1252	I	Chemical
Optical Emission Vacuum Spectrometric Analysis of Blast Furnace Iron by the Point-to-Plane Technique	ASTM E485	II	Chemical
Particle Size Distribution of Catalytic Material by Laser Light Scattering	ASTM D4464	III	Chemical
SEM EDAX	ASTM E1508	II or III	Chemical
Spectrophotometer – Non-Fluorescent	ASTM E1164	II	Chemical
Spectrophotometer – Non-Fluorescent	ASTM E1331	II	Chemical
TLC	ASTM D3156	I	Chemical
Wet Chemistry	ASTM D808	II	Chemical
XRF of SST	ASTM E572	II or III	Chemical
Abrasion, Taber, Organic Coatings	ASTM D4060	I	Coatings
Accelerated Exposure of Automotive Interior Trim Components Using a Controlled Irradiance Xenon-Arc Apparatus	SAE J2412	I	Coatings
Anodizing Coating Weight	ASTM B137	II	Coatings



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Carbon Arc Weathering	ASTM D750	I	Coatings
Coating Thickness	NASM 1312-12	II or IV	Coatings
Color	ASTM D2244	II	Coatings
Delta-E Value (Color Measurement)	SAE J1545	I	Coatings
Gloss	ASTM D523	II	Coatings
Impact Resistance test	ISO 6272-2	I	Coatings
Metal and Oxide Coating Thickness (SEM)	ASTM B748	IV	Coatings
Resistance to Water Spotting, Finish Disturbance, Salt Staining, and Discoloration	GM9133P	I	Coatings
Salt Spray	ASTM B117	I	Coatings
Salt Spray/Humidity/CASS	ASTM D1735	I	Coatings
Stain Resistance	ASTM D925	I	Coatings
Adhesion of Metallic Coating	ASTM B571	I	Coatings
Chip Resistance (Gravelometer)	SAE J400	I	Coatings
Coating Thickness	ASTM B487	II	Coatings
Coating Weight on Phosphated Panels	GM9733P	IV	Coatings
Degree of Blistering of Paints	ASTM D714	I	Coatings
Degree of Chalking	ASTM D4214	I	Coatings
Degree of Cracking of Exterior Paints	ASTM D661	I	Coatings
Effects of Household chemicals on Organic Finishes	ASTM D1308	I	Coatings
Knife Quick Adhesion for Stationary Glass Bonding materials to Paint	GM9522P	IV	Coatings
Pencil Hardness	ASTM D3363	I	Coatings
Resistance to Marring & Scuffing	GM9150P	I	Coatings
Salt Spray	FLTM BI 103	I	Coatings
Tape Adhesion	ASTM D3359	I	Coatings
Thermal Shock for Paint Adhesion	GM9525P	IV	Coatings
Visual Appraisal of Color (MacBeth)	ASTM D1729	I	Coatings
Water Fog Humidity Test	ASTM D2247	I	Coatings
Accelerated Ageing and Heat Resistance Testing	ISO 188	I	Environmental
Carbon Arc Weatherometer, Open Flame	ASTM G152	I	Environmental
CASS / Salt Spray / Humidity	ASTM B368	I or IV	Environmental
Corrosion Test for Insulation Materials	SAE J1389	I	Environmental
Environmental Stress Cracking, Crack Resistance	ASTM D1693	I	Environmental
Fluid Resistance of Gasket Materials	ASTM F146	I	Environmental
Haze and Luminous Transmittance	ASTM D1003	II	Environmental
Ozone Resistance	GM4486P	I	Environmental
Resistance to Penetration by Synthetic Blood	ASTM F1670	I	Environmental
Rubber Deterioration Surface Ozone Cracking In a Chamber	ASTM D1149	I	Environmental
Stress Corrosion Cracking Susceptibility	ASTM G39	I	Environmental
Stress Corrosion Cracking Susceptibility	ASTM G47	I or II	Environmental
UV Exposure	ASTM G154	I	Environmental



Weatherability	ASTM G147	I	Environmental
Weatherability	JIS D 0205	I	Environmental
Weathering	ASTM G155	I	Environmental
Weathering	ASTM G26 (Withdrawn 2000)	I	Environmental
Xenon Exposure Testing	ISO 4892-2	I	Environmental
Stress Corrosion Cracking Susceptibility	ASTM G44	I	Environmental
Accelerated Corrosion	GM9507P	I	General Automotive
Accelerated Corrosion	GM9540P	IV	General Automotive
Adhesion Between Steel Tire Cord	ASTM D2229	II	General Automotive
Adhesion Compatibility of Lubricants	GM3623M	IV	General Automotive
Automotive Environmental Cycles	GM9505P	I	General Automotive
Automotive Fogging	Ford BO 166-03	II	General Automotive
Automotive Fogging	SAE J1756	II	General Automotive
Cleavage Peel	GM9797P	IV	General Automotive
Corrosion Creepback	GM9102P	IV	General Automotive
Dime Scrape	GM9506P	I	General Automotive
Dimensional Stability	GM9452P	IV	General Automotive
Dimensional Testing Measurements ³ - CMM		IV ³	General Automotive
Dimensional Testing Measurements ³ - Caliper Inside/Out/Depth		IV ³	General Automotive
Dimensional Testing Measurements ³ - Comparators Linear/Angle		IV ³	General Automotive
Dimensional Testing Measurements ³ - Depth		IV ³	General Automotive
Dimensional Testing Measurements ³ - Go/No- Go gages (and other 'qualitative' measurements)		I	General Automotive
Dimensional Testing Measurements ³ - Indicators		IV ³	General Automotive
Dimensional Testing Measurements ³ - Micrometer- Inside		IV ³	General Automotive
Dimensional Testing Measurements ³ - Micrometer- Outside		IV ³	General Automotive
Durability Cycling of Vehicle Components		I	General Automotive
Fastening Strength of Hook-and-Loop Tape	GM9207P	IV	General Automotive
Federal Motor Vehicle Safety Standard: Flammability of Interior Materials	FMVSS 302	I or IV	General Automotive
Filiform Corrosion for Painted Aluminum Wheels and Trim	GM9682P	IV	General Automotive
Flammability of Materials	GM9070P	I or IV	General Automotive
Flammability of Polymeric Interior Materials- -Horizontal Test Method	SAE J369	I or IV	General Automotive
Fogging Test Method for Non-Metallic Materials	TSM 0503G	II	General Automotive
Gasoline Extractables in Hose	GM9067P	IV	General Automotive



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H/R Energy Dissipation	ECE-17 Para. 6.8	II	General Automotive
H/R Rearward Displacement	ECE-17 Para. 6.4	II	General Automotive
Hydrogen Sulfide Staining	GM9069P	I	General Automotive
Interior Trim Hand Peel Strength	GM9907P	IV	General Automotive
Non-Metals Flammability	ISO 3795	II	General Automotive
Performance Base Standard for Accelerated Exposure of Automotive Exterior Materials Using a Controlled Irradiance Xenon-Arc Apparatus	SAE J2527	I	General Automotive
Pump Shear - ELPO	GM9626P	IV	General Automotive
Salt Spray	GM4298	I	General Automotive
Seat Belt Durability	FMVSS 209	I	General Automotive
Settling Characteristics of Adhesives	GM9022P	IV	General Automotive
Shear Adhesion for Adhesives Used in Glass Bonding	GM9521P	IV	General Automotive
Side Impact	GM9751P	IV	General Automotive
Solid Content of Adhesives and Sealers	GM9010P	IV	General Automotive
Tape Adhesion	GM9071	I	General Automotive
Test Method for Determining Stiffness (Modulus of Bending) of Interior Trim Materials and Substrates	SAE J949	IV	General Automotive
Throw Power of Electrodeposition Primers	GM9535P	IV	General Automotive
Thumbnail Hardness	GM9507P	I	General Automotive
Vibration - Stress		I	General Automotive
Volatility of Lubricants (Pan Method)	GM9044P	IV	General Automotive
Warpage	GM9451P	IV	General Automotive
Water Fog Humidity Test	GM4465P	I	General Automotive
Wyzenbeek Wear Resistance	GM9082P	I	General Automotive
Xenon Arc Exposure	SAE J1885	I	General Automotive
Xenon Arc Exposure	SAE J1960	I	General Automotive
Cycle Life of Hook-and-Loop Tape	GM9208P	IV	General Automotive
Deterioration of Geotextiles by Exposure to Light, Moisture and Heat in a Xenon Arc Type Apparatus	ASTM D4355	II	Geosynthetics
Determining Apparent Opening Size of a Geotextile	ASTM D4751	II	Geosynthetics
Grab Breaking Load and Elongation of Geotextiles	ASTM D4632	II	Geosynthetics
Index Puncture Resistance of Geomembranes	ASTM D4833	II	Geosynthetics
Mass Per Unit Area of Geotextiles	ASTM D5261	II	Geosynthetics
Static Puncture Strength of Geotextiles and Related Products Using a 50mm Probe	ASTM D6241	II	Geosynthetics
Static Puncture Test (CBR-Test)	ISO EN 12236	II	Geosynthetics
Tensile Properties of Geotextiles	ASTM D4595	II	Geosynthetics
Thickness of Geosynthetics	ASTM D5199	II	Geosynthetics
Trapezoid Tearing Strength of Geotextiles	ASTM D4533	II	Geosynthetics
Wide Width Tensile Test	ISO EN 10319	II	Geosynthetics



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Bulk Density	ASTM C830	II	Mechanical
Compressibility & Recovery of Gasket Materials	ASTM F36	II	Mechanical
Compression	ISO 1653	II	Mechanical
Density	DIN 53 479	II	Mechanical
Dimensional Testing of Lacrosse Sticks	The Crosse, FIL (Rule 25)	IV (dimensional)	Mechanical
Dimensional Testing of Lacrosse Sticks	Manufacturers Specification, US Lacrosse (Rule 9)	IV	Mechanical
Fisher Number of Metal Powders and Related Compounds (Particle Size)	ASTM B330	II	Mechanical
Impact	GM9904P	II	Mechanical
Impact Shock	ASTM F355	II	Mechanical
Sieve Analysis	ASTM B214	II	Mechanical
Standard Test Method for Equipment and Prodedures Used in Evaluating the Performance Characteristics of Protective Headgear	ASTM F1446	II	Mechanical
Standard Test Method for Spinal Implant Constructs in a Vertebrectomy Model	ASTM F1717	II	Mechanical
Tear Propagation and Peel	DIN 53 539	I	Mechanical
Tensile Properties	DIN 53 504	II	Mechanical
Tensile Properties	ISO 99	II	Mechanical
Tension Testing of Nonmetallic Gasket Materials	ASTM F152	II	Mechanical
Volumetric Density	ASTM B329	IV	Mechanical
Surface Texture Measurement of Cold Rolled Sheets	SAE J911	IV	Mechanical - Metals
Ash	ASTM D482	II	Mechanical - Non-Metals
Drop Melt Point	ASTM D127	II	Mechanical - Non-Metals
Flash Point	ASTM D93	II	Mechanical - Non-Metals
Mechanical Seal Security	ISO 17712	I or II	Mechanical - Non-Metals
Softening Point	ASTM E28	I	Mechanical - Non-Metals
Bend	ASME Sec IX	I	Metals
Bend	AWS D1.1, 2&5	I	Metals
Bend Test	ASTM E290	I	Metals
Bend Test	EN 910	I	Metals
Carburization / Decarburization	SAE J121	I	Metals
Carburization / Decarburization	SAE J423	II	Metals
Charpy Impact	EN 10045	II	Metals
Coating Weight by X-Ray Spectrometry	ASTM B568	II	Metals
Coating Weight on Steel by XRF	ASTM A754	IV	Metals



Compression	ASTM E9	II	Metals
Compression	ASTM F606	I	Metals
Cone Stripping	ASTM F606	I	Metals
Degree of Banding or Orientation of Microstructures	ASTM E1268	I	Metals
Density (Near Full Dense)	ASTM B311	II	Metals
Depth of Decarburization	ASTM E1077	II	Metals
Determination of Mass per Unit Area	ISO EN 965	II	Metals
Determination of Metal Content	ASTM D4004	II	Metals
Determining Electrical Conductivity	ASTM E1004	II	Metals
Drop-Weight Test	ASTM E208	I	Metals
Ductility (Bend, Formability)	ASTM E190	I	Metals
Dynamic Tear Strength	ASTM E604	II	Metals
Elevated Temperature Tension Tests	ASTM E21	II	Metals
Embrittlement	ASTM A194	I	Metals
Embrittlement	ASTM F606	I	Metals
Embrittlement	NASM 1312-105	I	Metals
Embrittlement	NASM 1312-14	I	Metals
Embrittlement	NASM 1312-5	I	Metals
Fatigue	NASM 1312-11	I or II	Metals
General Alloy Sorting	ASTM E1476	I	Metals
General Alloy Sorting	ASTM E977	I	Metals
Grain Size	ASTM E112 (comparison)	I	Metals
Grain Size	ASTM E112 (Intercept)	IV	Metals
Hardenability of Steel (Jominy test)	ASTM A255	II	Metals
Hardness	NASM 1312-6	II	Metals
Hardness of Welded Joints	EN 1043-1	II	Metals
Hardness, Brinell	ASTM E10	II	Metals
Hardness, Knoop	ASTM E384	II	Metals
Hardness, Rockwell	ASTM E18	II	Metals
Hardness, Vickers	ASTM E384	II	Metals
Hardness, Vickers	ASTM E92	II	Metals
High Pressure (Hydraulic) Burst	AMS 4081	I	Metals
High Pressure (Hydraulic) Burst	AMS 4083	I	Metals
Hydrogen Embrittlement	SAE J81	I	Metals
Impact Testing	ASTM E23	II	Metals
Impact U & V	ASTM A370	II	Metals
Inclusion Content	ASTM E45	I	Metals
Intergranular Corrosion	ASTM A262	I	Metals
Leaching for Halides and Sulfur	MIL-STD-2041	II	Metals
Macroetching	ASTM E381	I	Metals
Macroetching	ASTM A561	I	Metals
Macroetching	ASTM A604	I	Metals
Magnetic Permeability	ASTM A342	I	Metals



Metallographic Identification of Microstructure in Cemented Carbides	ASTM B657	I	Metals
Microetching and Macroetching	ASTM E340	I	Metals
Microetching and Macroetching	ASTM E407	I	Metals
N Value Testing	ASTM A646	II	Metals
Pitting & Crevice Corrosion Susceptibility	ASTM G48	I or II	Metals
Plating Thickness	ASTM B499	II	Metals
Plating Thickness	NASM 1312-2	II	Metals
R Value Testing	ASTM E517	II	Metals
Salt Spray	ASTM B117	I	Metals
Shear	ASTM B565	II	Metals
Shear	ASTM B769	II	Metals
Shear	MIL-P-10971	II	Metals
Shear	SAE J496	II	Metals
Stress Corrosion Cracking Susceptibility	ASTM G49	I	Metals
Stress Rupture	ASTM E139	II	Metals
Surface Discontinuities of Fasteners	ASTM F788	I	Metals
Surface Discontinuities of Fasteners	ASTM F812	I	Metals
Surface Mercury Contamination	MIL-STD-767	I	Metals
Surface Roughness	ANSI B46.1	II	Metals
Tensile and Proof Load	NASM 1312-13	II	Metals
Tensile Properties	MIL-STD-1312 (Cancelled 1997)	II	Metals
Tensile Testing	ISO 6892-1	II	Metals
Tensile Testing	ASTM B557	II	Metals
Tension & Proof	ASTM A370	II	Metals
Tension & Proof	ASTM A574	II	Metals
Tension & Proof	ASTM E8 / E8M	II	Metals
Tension & Proof	ASTM F606 / ASTM F606M	II	Metals
Tension & Proof	NASM 1312-8	II	Metals
Tension & Proof	SAE J429	II	Metals
Time-for-Rupture Notch Tension Tests	ASTM E292	I or II	Metals
Transverse Tensile Test	EN 895	II	Metals
Weight of Coating on Iron and Steel Articles With Zinc or Zinc Alloys (Mass / Length)	ASTM A90	II	Metals
X-Ray Emission Spectrometric Analysis of Low-Alloy Steels	ASTM E1085	II	Metals
Analysis of Aluminum and Aluminum Alloys by Atomic Emission Spectrometry	ASTM E1251	II	Metals
Cup Ductility Test for Sheet and Strip Metal	GM4471P	IV	Metals
Determination of Carbon, Sulfur, Nitrogen, and Oxygen in Steel and in Iron, Nickel, and Cobalt Alloys	ASTM E1019	II	Metals



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Determination of Hydrogen in Titanium and Titanium Alloys by the Inert Gas Fusion Thermal Conductivity Method	ASTM E1447	II	Metals
Determination of Oxygen in Titanium and Titanium Alloys by the Inert Gas Fusion Technique	ASTM E1409	II	Metals
Microstructure of Graphite (in Iron)	ASTM A247	I	Metals
Optical Emission Vacuum Spectrometric Analysis of Carbon and Low-Alloy Steel	ASTM E415	II	Metals
Optical Emission Vacuum Spectrometric Analysis of Stainless Steel by the Point-to-Plane Excitation Technique	ASTM E1086	II	Metals
Salt Spray	DIN 50021 (Withdrawn 1988)	I	Metals
Salt Spray	ASTM B117	I	Metals
Scab Corrosion Creepback of Paint Systems on Metal Substrates	GM9511P	IV	Metals
X-Ray Emission Spectrometric Analysis of Low-Alloy Steels and Cast Irons	ASTM E322	II	Metals
Acoustic Emission	ASTM E751	I	Nondestructive
Coating Thickness by Beta Backscatter	ASTM B567	II	Nondestructive
Coating Thickness by Magnetic-Field or Eddy-Current	ASTM E376	IV	Nondestructive
Density, Oil Content and Porosity of Metal Structural Parts and Oil-Impregnated Bearings	ASTM B328	II	Nondestructive
Eddy Current Plating Thickness	ASTM B244	IV	Nondestructive
Electromagnetic (Eddy-Current)	ASTM E243	I	Nondestructive
Electromagnetic (Eddy-Current)	ASTM E309	I	Nondestructive
Electromagnetic (Eddy-Current)	ASTM E376	II	Nondestructive
Electromagnetic (Eddy-Current)	ASTM E426	I	Nondestructive
Electromagnetic (Eddy-Current)	ASTM E571	I	Nondestructive
Electromagnetic (Eddy-Current)	ASTM E690	I	Nondestructive
Estimating the Depth of Decarburization of Steel	ASTM E1077	II	Nondestructive
Leak Testing	ASTM E1003	I	Nondestructive
Leak Testing	ASTM E427	II	Nondestructive
Leak Testing	ASTM E498	I	Nondestructive
Leak Testing	ASTM E499	I	Nondestructive
Leak Testing	ASTM E515	I	Nondestructive
Liquid Penetrant	ASTM E1208	I	Nondestructive
Liquid Penetrant	ASTM E1209	I	Nondestructive
Liquid Penetrant	ASTM E1210	I	Nondestructive
Liquid Penetrant	ASTM E1219	I	Nondestructive
Liquid Penetrant	ASTM E1220	I	Nondestructive
Liquid Penetrant	ASTM E1417	I	Nondestructive
Liquid Penetrant	ASTM E1418	I	Nondestructive



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Liquid Penetrant	ASTM E165	I	Nondestructive
Magnetic Particle	ASTM E1444	I	Nondestructive
Magnetic Particle	ASTM E709	I	Nondestructive
Mass Per Unit Area of Electrodeposited and Related Coatings by Gravimetric and Other Chemical Analysis	ASTM B767	IV	Nondestructive
Metals Sorting and Identification	ASTM E566	I	Nondestructive
Metals Sorting and Identification	ASTM E977	I	Nondestructive
Radiography	ASTM E1030	I	Nondestructive
Radiography	ASTM E1032	I	Nondestructive
Radiography	ASTM E1255	I	Nondestructive
Radiography	ASTM E1416	I	Nondestructive
Radiography	ASTM E142	I	Nondestructive
Radiography	ASTM E1441	II	Nondestructive
Radiography	ASTM E1734	I	Nondestructive
Radiography	ASTM E1742	I	Nondestructive
Radiography	ASTM E94	I	Nondestructive
Thickness and Electrode Potential of Individual Layers in Multiplayer Nickel Deposit (STEP)	ASTM B764	IV	Nondestructive
Ultrasonic	ASTM E1001	I	Nondestructive
Ultrasonic	ASTM E114	I for flaw detection, II for thickness measurements	Nondestructive
Ultrasonic	ASTM E127	II	Nondestructive
Ultrasonic	ASTM E164	I	Nondestructive
Ultrasonic	ASTM E213	I	Nondestructive
Ultrasonic	ASTM E214	I	Nondestructive
Ultrasonic	ASTM E273	I	Nondestructive
Ultrasonic	ASTM E494	IV	Nondestructive
Ultrasonic	ASTM E797	II	Nondestructive
Weight and Composition of Coating on Terne Sheet by the Triple-Spot Test	ASTM A309	IV	Nondestructive
Weight of Coating on Aluminum-Coated Iron or Steel Articles	ASTM A428	II	Nondestructive
Optical Density of Smoke	ASTM E662	I	Optical
Abrasion Resistance	ASTM D2228	II	Plastics and Rubber
Abrasion Resistance	ASTM D5963	II	Plastics and Rubber
Abrasion Resistance	DIN 53 516	II	Plastics and Rubber
Abrasion Resistance	ISO 4649	II	Plastics and Rubber
Abrasion Resistance	ASTM D1630	II	Plastics and Rubber
AC Loss Characteristics and Permittivity (Dielectric Constant)	ASTM D150	II	Plastics and Rubber
Accelerated Aging and Heat Resistance	ASTM D3045	I	Plastics and Rubber
Accelerated Aging and Heat Resistance	ASTM D572	I	Plastics and Rubber



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Apparent Density, Bulk Factor, Pourability	ASTM D1895	II	Plastics and Rubber
Ash Content	ASTM D1506	II	Plastics and Rubber
Ash Content in Plastics	ASTM D5630	II	Plastics and Rubber
Barcol Hardness - Rigid Plastics	ASTM D2583	II	Plastics and Rubber
Brittleness Point of Flexible Polymers & Coated Fabrics	ASTM D2137	I	Plastics and Rubber
Carbon Black Dispersion in Rubber	ASTM D2663	I	Plastics and Rubber
Cellular Plastics Test	ASTM D3576	I or II	Plastics and Rubber
Cellular Plastics Test	ASTM D1055	II	Plastics and Rubber
Charpy Impact	ISO 179	II	Plastics and Rubber
Chemical Resistance	ASTM D543	I	Plastics and Rubber
Chloramine Resistance	ASTM D6284	II	Plastics and Rubber
Compositional Analysis of Thermogravimetry	ISO 11358	II	Plastics and Rubber
Compression	ASTM D395	II	Plastics and Rubber
Compression	ISO 3384	II	Plastics and Rubber
Compression	ISO 6056	II	Plastics and Rubber
Compression	ISO 815	II	Plastics and Rubber
Compression Set	ASTM D1229	II	Plastics and Rubber
Compression Set	ASTM D395	II	Plastics and Rubber
Compressive Properties of Rigid Plastics	ASTM D695	II	Plastics and Rubber
Conditioning of Plastics for Testing	ASTM D618	I	Plastics and Rubber
Conditioning of Plastics for Testing	ISO 291	I	Plastics and Rubber
Condom and Latex Gloves Test	ASTM D3492	I	Plastics and Rubber
Condom and Latex Gloves Test	ASTM D5151	I	Plastics and Rubber
Condom and Latex Gloves Test	ASTM D6124	I	Plastics and Rubber
Condom and Latex Gloves Test	BS 3704	I	Plastics and Rubber
Condom and Latex Gloves Test	ISO 4074	I	Plastics and Rubber
Crack Resistance	ASTM D813	I	Plastics and Rubber
DC Resistance and Conductance	ASTM D257	II or IV	Plastics and Rubber
Deflection Temperature of Plastics Under Flexural Load (HDT)	ASTM D648	II	Plastics and Rubber
Density	ASTM D1817	IV	Plastics and Rubber
Density (Rubber)	ASTM D297	IV	Plastics and Rubber
Density and Specific Gravity	ASTM D792	II	Plastics and Rubber
Density and Specific Gravity	ISO 1183-1, -2	II or IV	Plastics and Rubber
Determination of Burning Behavior by Oxygen Index	ISO 4589-1, -2	II	Plastics and Rubber
Determination of Carbon Black Content in Polyethylene Compounds by the Muffle Furnace Technique	ASTM D4218	II	Plastics and Rubber
Determination of Flexural Properties	ISO 178	II	Plastics and Rubber
Determination of Indentation Hardness by Means of a Durometer	ISO 868	II	Plastics and Rubber
Determination of Melt Flow Rate	ISO 1133	II	Plastics and Rubber
Determination of Permanent Effects of Heat	ASTM D794 (Withdrawn 1998)	I	Plastics and Rubber



Determination of Refractive Index	ISO 489	II	Plastics and Rubber
Determination of Resistance to Wear by Abrasive Wheels	ISO 9352	II	Plastics and Rubber
Determination of Tear Strength	ISO 34-1, -2	II	Plastics and Rubber
Determination of Tensile Properties	ISO 527	II	Plastics and Rubber
Determination of Time-Temperature Limits After Prolonged Exposure to Heat	ISO 2578	I	Plastics and Rubber
Determination of Vicat Softening Temperature	ISO 306	II	Plastics and Rubber
Determination of Water Content	ISO 15512	II	Plastics and Rubber
Determination of Xylene Solubles in Propylene Plastics	ASTM D5492	III	Plastics and Rubber
Differential Scanning Calorimetry (DSC)	ASTM D3417	II	Plastics and Rubber
Differential Scanning Calorimetry (DSC)	ASTM D3895	II	Plastics and Rubber
Differential Scanning Calorimetry (DSC)	ASTM D4591	II	Plastics and Rubber
Differential Scanning Calorimetry (DSC) of Plastics	ISO 11357-1, -2, -3	II	Plastics and Rubber
Durometer Hardness	ASTM D2240	II	Plastics and Rubber
Durometer Hardness – Rubber	ASTM D2240	II	Plastics and Rubber
Durometer Hardness – Rubber	DIN 53 505	II	Plastics and Rubber
Dynamic and Predictive Testing	SAE J1085a	II	Plastics and Rubber
Dynamic Mechanical Analysis (DMA)	ASTM D5992	II	Plastics and Rubber
Dynamic Mechanical Properties	ASTM D5024	II	Plastics and Rubber
Dynamic Mechanical Properties of Plastics	ASTM D4065	II	Plastics and Rubber
Dynamic Ozone Cracking	ASTM D3395	I	Plastics and Rubber
Effects of Exposure to Fluids on Rubber	DIN 53 521	I	Plastics and Rubber
Effects of Liquids	ASTM D471	II	Plastics and Rubber
Electrical Resistance	ASTM D991	IV	Plastics and Rubber
Electrical Strength of Insulating Materials - Part 1	IEC 60243-1	II	Plastics and Rubber
Extension Cycling Fatigue	ASTM D4482	I	Plastics and Rubber
Flammability	ASTM D5132	II	Plastics and Rubber
Flammability	ASTM D3801	II	Plastics and Rubber
Flammability	ISO 1210	II	Plastics and Rubber
Flammability	UL 746B	II	Plastics and Rubber
Flammability	UL 94	II	Plastics and Rubber
Flammability, Rigid Plastics	ASTM D635	II	Plastics and Rubber
Flexural Properties	ASTM D790	II	Plastics and Rubber
Fluorescent UV Exposure of Plastics	ASTM D4329	I	Plastics and Rubber
Fogging	SAE J1756	II	Plastics and Rubber
Gardner Impact	ASTM D5420	I or II	Plastics and Rubber
Gardner Impact	Chrysler LP-463DB-14-01	I or II	Plastics and Rubber
Gas Permeability - Plastic Film/Sheeting	ASTM D1434 (Procedure V)	IV	Plastics and Rubber
HDT / Vicat Softening Point	ASTM D1525	II	Plastics and Rubber



Heat Deflection Temperature (HDT) / Vicat Softening Point	ISO 75	II	Plastics and Rubber
Heat Generation and Flexing Fatigue in Compression	ASTM D623	II	Plastics and Rubber
Impact Resistance	ASTM D4226	II	Plastics and Rubber
Impact Resistance	ASTM D4812	II	Plastics and Rubber
Instrumented Impact	ASTM D3763	I or II	Plastics and Rubber
Iodine Adsorption Number	ASTM D1510	II	Plastics and Rubber
IZOD Impact Strength	ISO 180	II	Plastics and Rubber
Izod Pendulum Impact Resistance of Notched Specimens of Plastic	ASTM D256	II	Plastics and Rubber
Latex Testing	ASTM D1076	II	Plastics and Rubber
Latex Testing	ASTM D1278	II	Plastics and Rubber
Leaching for Halides and Sulfur	MIL-STD-2190 (Cancelled 2005)	II	Plastics and Rubber
Low Temperature Brittleness	ASTM D746	I	Plastics and Rubber
Low Temperature Brittleness	ISO 812	II	Plastics and Rubber
Low Temperature Brittleness	ASTM D1329	II	Plastics and Rubber
Mechanical Contraceptives, Deterioration Compression and Fatigue Resistance of Coil Spring and Flat Spring Diaphragms	ISO 8009, Annex E	IV	Plastics and Rubber
Mechanical Contraceptives, Determination of Deterioration After Accelerated Aging by Oven Treatment	ISO 8009, Annex D	I	Plastics and Rubber
Mechanical Contraceptives, Determination of Dome Thickness	ISO 8009, Annex B	IV	Plastics and Rubber
Mechanical Contraceptives, Determination of Size	ISO 8009, Annex A	IV	Plastics and Rubber
Mechanical Contraceptives, Determination of Tensile Properties	ISO 8009, Annex C	II	Plastics and Rubber
Mechanical Contraceptives, Determination of Twisting During Compression Coil-Spring and Flat Spring Diaphragms	ISO 8009, Annex F	IV	Plastics and Rubber
Mechanical Contraceptives, Determination of Visible Defects	ISO 8009, Annex G	I	Plastics and Rubber
Melt Flow	ASTM D1238	II	Plastics and Rubber
Melt Range	ISO 3146 (Method A)	II	Plastics and Rubber
Melt Range	ASTM D1519	II	Plastics and Rubber
Moisture Content	ASTM D4019	II	Plastics and Rubber
Mold Shrinkage	ASTM D955	IV	Plastics and Rubber
Mold Shrinkage	ISO 294-1, -2, -3, -4	IV	Plastics and Rubber
Morphological Characterization of Carbon Black	ASTM D3849	I	Plastics and Rubber
Particle Size Distribution	ASTM D3451	II	Plastics and Rubber
Pelleted Fines and Attrition	ASTM D1508	II	Plastics and Rubber



Prmittivity and Dielectric Dissipation Factor of Electrical Insulating Materials	IEC 60250	II	Plastics and Rubber
Proof and Comparative Tracking Indices of Solid Insulating Materials	IEC 60112	II	Plastics and Rubber
Properties of Polymeric Materials by Means of Capillary Rheometer	ASTM D3835	II	Plastics and Rubber
Relative Viscosity, Melting Point, Moisture Content	ASTM D789	II	Plastics and Rubber
Resistance of Rubber to Ozone Cracking – Reference Methods for Determining Ozone Concentration in Laboratory Test Chambers	DIN 53 509-2	I	Plastics and Rubber
Rheological Properties by Rotational (Brookfield) Viscometer	ASTM D2196	II	Plastics and Rubber
Rockwell Hardness (Plastics)	ASTM D785	II	Plastics and Rubber
Rubber - Identification by Infrared Spectrophotometry	ASTM D3677	I or II	Plastics and Rubber
Rubber Belting, Flat Type	ASTM D378	II	Plastics and Rubber
Rubber- Deterioration by Heating in Air (Test Tube)	ASTM D865	I	Plastics and Rubber
Rubber- Deterioration in an Air Oven (Heat Aging)	ASTM D573	I	Plastics and Rubber
Rubber Deterioration-Surface Cracking	ASTM D518	I	Plastics and Rubber
Rubber Properties In Compression	ASTM D575	II	Plastics and Rubber
Rubber Properties in Compression (Mechanical Oscillograph)	ASTM D945	II	Plastics and Rubber
Rubber Property - International Hardness	ASTM D1415	II	Plastics and Rubber
Rubber Property-Adhesion to Flexible Substrate	ASTM D413	II	Plastics and Rubber
Rubber Property-Resilience by Vertical Rebound	ASTM D2632	II	Plastics and Rubber
Shear Strength	ASTM D732	II	Plastics and Rubber
Sieve Residue	ASTM D1514	II	Plastics and Rubber
Spectrophotometer – Non-Fluorescent	ASTM D1925 (withdrawn 1995)	II	Plastics and Rubber
Static & Kinetic Coefficients of Friction of Plastic Film & Sheetting	ASTM D1894	II	Plastics and Rubber
Stiffness Test	ASTM D1053	II	Plastics and Rubber
Tear Resistance	ASTM D1004	II	Plastics and Rubber
Tear Strength	ASTM D624	II	Plastics and Rubber
Tensile (Plastics)	ASTM D638	II	Plastics and Rubber
Tensile (Rubber)	ASTM D412	II	Plastics and Rubber
Tensile Properties	ASTM D3137	II	Plastics and Rubber
Tensile Properties of Plastics	ASTM D1708	II	Plastics and Rubber
Tensile Properties of Rubber	ISO 37	II	Plastics and Rubber
Tensile Properties Thin Plastic Sheetting	ASTM D882	II	Plastics and Rubber
Test for Volatiles in Silicone Rubber	Chrysler LP-461J-127	III	Plastics and Rubber



Test for Volatiles in Silicone Rubber	GM9009P	III	Plastics and Rubber
Thermal Conductivity of Plastics Using Line-Source Method	ASTM D5930	II	Plastics and Rubber
Thermal Gravimetric Analysis (TGA)	ASTM E1131	II	Plastics and Rubber
Thermomechanical Analysis, TMA, of Plastics	ISO 11359	II	Plastics and Rubber
Transition Temperatures of Polymers by Thermal Analysis (DSC)	ASTM D3418	II	Plastics and Rubber
Transmittance of Toluene Extract	ASTM D1618	II	Plastics and Rubber
Trouser Tear Strength of Rubber	DIN 53 507	II	Plastics and Rubber
Vapor Transmission of Volatile Liquids	ASTM D814	II	Plastics and Rubber
Vicat Softening Temperature	ASTM D1525	II	Plastics and Rubber
Viscosity, Mooney	ASTM D1646	II	Plastics and Rubber
Volatile Content Loss	ASTM D1203	II	Plastics and Rubber
Vulcanization Using Oscillating Disk Cure Meter	ASTM D5289	II	Plastics and Rubber
Vulcanization Using Oscillating Disk Cure Meter (ODR)	ASTM D2084	II	Plastics and Rubber
Water Absorption	ASTM D570	II	Plastics and Rubber
Water Absorption	ISO 62	II	Plastics and Rubber
Xenon Arc	SAE JI885	I	Plastics and Rubber
Yellowness Index	ASTM E313	II	Plastics and Rubber
Ash Content of Plastics	GM9306P	IV	Plastics and Rubber
Glass Content of Glass Reinforced Plastics	GM9077P	IV	Plastics and Rubber
Impact Strength of Plastics	GM9032P	IV	Plastics and Rubber
Paint Thickness of Flexible Plastic parts	GM9518P	IV	Plastics and Rubber
Test Method for Measuring Thickness of Automotive Textiles and Plastics	SAE J882	IV	Plastics and Rubber
Abrasion Resistance	ASTM D3389	II	Textiles
Brittleness Point of Flexible Polymers & Coated Fabrics	ASTM D2137	I	Textiles
Bursting Strength of Textile Fabrics	ASTM D3786 / D3786M	II	Textiles
Colour Fastness	ISO 105-A02	I	Textiles
Determination of Breaking Force and Extension of Textile Fabric	AS 2001.2.3	II	Textiles
Determination of Burst Strength – CBR Plunger Method	AS 3706.4	II	Textiles
Determination of Mass Per Unit Area and Mass Per Unit Length of Fabrics	AS 2001.2.13	II	Textiles
Determination of Pore-Size Distribution – Dry Sieving Method	AS 3706.7	II	Textiles
Determination of Puncture Resistance – Drop Cone Method	AS 3706.5	II	Textiles
Determination of Tearing Strength – Trapezoidal Method	AS 3706.3	II	Textiles



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Determination of Tensile Properties – Wide Strip Method	AS 3706.2	II	Textiles
Determination of Thickness	AS 2001.2.15	II	Textiles
Determination of Thickness of Textiles and Textile Products	ISO 5084	IV	Textiles
Evaluation of Coated Fabrics	ASTM D751	II	Textiles
Gas/Liquid Permeability Resistance	ASTM F1383	II	Textiles
Gas/Liquid Permeability Resistance	ASTM F739	II	Textiles
Gas/Liquid Permeability Resistance - Protective Clothing Materials	ASTM D6978	II	Textiles
Gray Scale	ISO 105-A04	I	Textiles
Resistance to Penetration by Liquids	ASTM F903	I	Textiles
Shrinkage of Yarn (Boiling Water)	ASTM D2259	II	Textiles
Standard Test Method for Measuring Thickness of Leather Test Specimens	ASTM D1813	IV	Textiles
Abrasion Resistance, Flex	ASTM D3885	I	Textiles
Abrasion Resistance, Inflated Diaphragm	ASTM D3886	I	Textiles
Abrasion Resistance, Martindale	ASTM D4966	I	Textiles
Abrasion Resistance, Uniform	ASTM D4158	I	Textiles
Accelerated Aging of Inflatable Restraint Fabric	ASTM D5427	I	Textiles
Adhesion of Tire Cord to Rubber	ASTM D4776	II	Textiles
Air Permeability of Fabrics	ASTM D737	II	Textiles
Appearance of Fabrics After Repeated Home Laundering	AATCC 124	I	Textiles
Appearance of Fabrics in Wash / Wear	AATCC 88A	I	Textiles
Appearance of Seams in Durable Press Items after Repeated Home Laundering	AATCC 88B	I	Textiles
Appearance: Retention of Creases in Fabric after Repeated Home Laundering	AATCC 88C	I	Textiles
Bow and Skewness in Woven and Knitted Fabric	ASTM D3882	II	Textiles
Breaking Strength Yarn, Skein Method	ASTM D1578	II	Textiles
Bulk Properties of Textured Yarn	ASTM D4031	II	Textiles
Colorfastness to Burnt Gas Fumes	AATCC 23	I	Textiles
Colorfastness to Crocking: Rotary Vertical Crockmeter Method	AATCC 116	I	Textiles
Colorfastness to Crocking; AATCC Crockmeter Method	AATCC 8	I	Textiles
Colorfastness to Laundering, Home and Commercial: Accelerated	AATCC 61	I	Textiles
Colorfastness to Light	AATCC 16	I	Textiles
Colorfastness to Perspiration	AATCC 15	I	Textiles
Colorfastness to Water	AATCC 107	I	Textiles
Colorfastness to Water Spotting	AATCC 104	I	Textiles
Conditioning Textiles for Testing	ASTM D1776	I	Textiles



Dimensional Change in Home Laundry	AATCC 135	II	Textiles
Dimensional Change in Home Laundry	AATCC 150	II	Textiles
Dimensional Changes in Commercial Laundry	AATCC 96	II	Textiles
Extension Force of Partially Oriented Yarn	ASTM D5344	II	Textiles
Extractable Content in Textiles	AATCC 97	II	Textiles
Extractable Matter in Textiles	ASTM D2257	II	Textiles
Fabric Count of Woven Fabric	ASTM D3775	II	Textiles
Fiber Analysis: Qualitative	AATCC 20	I	Textiles
Fiber Weight Loss and Wear on Carpet	GM9337P	IV	Textiles
Filament Yarn Entanglement by Needle Insertion	ASTM D4724	II	Textiles
Flame Resistance of Textiles (Vertical Test)	ASTM D6413	II	Textiles
Flammability of Apparel Textiles	ASTM D1230	II	Textiles
Grading Spun Yarns for Appearance	ASTM D2255	I	Textiles
Length of Woven Fabric	ASTM D3773	II	Textiles
Mass / Unit Area Nonwoven	ASTM D6242	II	Textiles
Mass per Unit Area (Weight) Woven Fabric	ASTM D3776	II	Textiles
Oil Repellency – Hydrocarbon Resistance Test	AATCC 118	I	Textiles
pH of Water-Extract	AATCC 81	II	Textiles
Physical Properties of Fabrics and Yarns Used in Inflatable Restraints	ASTM D5446	II	Textiles
Pilling Resistance, Brush Method	ASTM D3511	I	Textiles
Pilling Resistance, Random Tumble	ASTM D3512	I	Textiles
Quantitative Analysis of Textiles	ASTM D629	II	Textiles
Quantitative Fiber Analysis	AATCC 20A	II	Textiles
Seam Strength in Inflatable Restraint Cushions	ASTM D5822	II	Textiles
Skewness Changes in Fabric	AATCC 179	II	Textiles
Slippage of Yarn in Seam	ASTM D434	II	Textiles
Snagging Resistance Mace Method	ASTM D3939	I	Textiles
Stiffness by Circular Bend	ASTM D4032	II	Textiles
Stiffness of Fabric, Cantilever	ASTM D1388	II	Textiles
Stiffness of Nonwoven Fabric, Cantilever	ASTM D5732	II	Textiles
Stitch Tear Resistance of Vinyl Coated Leather	GM9149P	IV	Textiles
Strength / Elongation Grab Method	ASTM D5034	II	Textiles
Strength / Elongation Strip Method	ASTM D5035	II	Textiles
Surface Water Absorption of Terry Fabrics	ASTM D4772	II	Textiles
Tear Resistance Elmendorf Method	ASTM D1424	II	Textiles
Tear Strength Fabrics Tongue Method	ASTM D2261	II	Textiles
Tear Strength Nonwoven, Elmendorf	ASTM D5734	II	Textiles
Tear Strength Nonwoven, Trapezoid	ASTM D5733	II	Textiles
Tear Strength Trapezoid Method	ASTM D5587	II	Textiles
Tensile Properties of Yarn Single Strand	ASTM D2256	II	Textiles
Tension and Elongation of Elastic Fabrics	ASTM D4964	II	Textiles




Test Method for Determining Dimensional Stability of Automotive Textile Materials	SAE J883	IV	Textiles
Test Method for Measuring Thickness of Automotive Textiles and Plastics	SAE J882	IV	Textiles
Testing Nonwoven Fabrics	ASTM D1117	II	Textiles
Testing Tire Cord and Fabric	ASTM D885	II	Textiles
Thermal Shrinkage of Yarn (Testrite)	ASTM D5591	II	Textiles
Thickness of Highloft Nonwoven Fabric	ASTM D5736	II	Textiles
Thickness of Nonwoven Fabric	ASTM D5729	II	Textiles
Thickness of Textiles	ASTM D1777	II	Textiles
Twist in Single Yarn Untwist-Retwist	ASTM D1422	II	Textiles
Twist in Yarn by Direct Counting	ASTM D1423	II	Textiles
Visual Appraisal of Color (MacBeth)	AATCC 16	I	Textiles
Visual Inspection of Inflatable Restraint Fabric	ASTM D5426	I	Textiles
Visually Inspecting and Grading Fabric	ASTM D5430	II	Textiles
Water Repellency: Spray Test	AATCC 22	I	Textiles
Water Resistance: Hydrostatic Pressure Test	AATCC 127	I	Textiles
Water Resistance: Impact Penetration Test	AATCC 42	I	Textiles
Water Resistance: Rain Test	AATCC 35	I	Textiles
Weather Resistance: Xenon Lamp Exposure	AATCC 169	I	Textiles
Width of Woven Fabric	ASTM D3774	II	Textiles
Wrinkle Recovery of Fabrics: Appearance Method	AATCC 128	I	Textiles
Wrinkle Recovery of Fabrics: Recovery Angle Method	AATCC 66	I	Textiles
Yarn Crimp / Take-up in Woven Fabric	ASTM D3883	II	Textiles
Yarn Number by Skein Method	ASTM D1907	II	Textiles
Ash Content	ISO 3451	II	Thermal
Differential Scanning Calorimetry (DSC)	ASTM D4419	II	Thermal
Differential Scanning Calorimetry (DSC)	ASTM E793	II	Thermal
Linear Thermal Expansion (TMA)	ASTM E831	II	Thermal
Melting and Crystallization Temperatures	ASTM E794	II	Thermal

¹Note: Category II test(s) may include Chemistry tests if limits (+/-) on inputs and report information is specified.

²Note: Category III test(s) may include non-Chemistry tests.

³Note: If the dimensional testing measurement serves as a link in a traceability chain and the laboratory has been assessed to the A2LA Calibration Program Requirements, the dimensional test will be classified as a Category V test. All other 'quantitative' dimensional tests will be considered a Category IV test, and all 'qualitative' dimensional tests will be considered a Category I test.

⁴Note: Please reference ISO/IEC 17025:2005, section 5.4.6.2, note 2, for further information regarding well-recognized test methods.

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APPENDIX A - Document Revision History

Date	Description
3/11/11	Revision history started. Chart on Page 2 updated to meet current requirements for decision charts. Clarification added on page 3 of the test types and material types. Additional testing added to all pages.
11/10/11	Tests were added in the following categories: Mechanical, Chemical, Metals, Plastics and Rubber and Textiles.