

SCOPE OF ACCREDITATION TO ISO/IEC 17025:2017

INTERTEK PLASTICS TECHNOLOGY LABORATORIES, INC.

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MECHANICAL

Valid To: February 28, 2023 Certificate Number: 0619.01

In recognition of the successful completion of the A2LA evaluation process, accreditation is granted to this laboratory to perform the following tests on <u>Plastics and Polymers</u>, <u>Rubber and Rubber Products</u>, <u>Composites</u>, <u>Films and Packaging</u>:

Test Description	Test Standard
Standard Test Method for Density of Sandwich Core Materials	ASTM C271/C271M
Standard Test Method for Water Absorption of Core Materials for Structural Sandwich Constructions (Method A)	ASTM C272
Standard Test Method for Shear Properties of Sandwich Core Materials	ASTM C273/C273M
Standard Test Method for Flat Wise Tensile Strength of Sandwich Constructions	ASTM C297/C297M
Standard Test Method for Dielectric Breakdown Voltage and Dielectric Strength of Solid Electrical Insulating Materials at Commercial Power Frequencies	ASTM D149
Standard Test Method for AC Loss Characteristics and Permittivity (Dielectric Constant) of Solid Electrical Insulation	ASTM D150
Standard Test Method for Determining the Izod Pendulum Impact Resistance of Plastics	ASTM D256
Standard Test Method for DC Resistance or Conductance of Insulating Materials	ASTM D257
Standard Test Method for Rubber Property-Compression Set (Method B)	ASTM D395
Standard Test Method for Vulcanized Rubber and Thermoplastic Elastomers-Tension	ASTM D412
Standard Test Method for Rubber Property-Effect of Liquids	ASTM D471
Standard Test Method for Specular Gloss	ASTM D523
Standard Practice for Evaluating the Resistance of Plastics to Chemical Reagents	ASTM D543

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Test Description	Test Standard
Standard Test Method for Water Absorption of Plastics	ASTM D570
Standard Test Method for Rubber-Deterioration in an Air Oven	ASTM D573
Standard Practice for Conditioning Plastics for Testing	ASTM D618
Standard Test Method for Tear Strength of Conventional Vulcanized Rubber and Thermoplastic Elastomers	ASTM D624
Standard Test Method for Rate of Burning and/or Extent and Time of Burning of Plastics in a Horizontal Position	ASTM D635
Standard Test Method for Tensile Properties of Plastics	ASTM D638
Standard Test Method for Deflection Temperature of Plastics Under Flexural Load in the Edgewise Position	ASTM D648
Standard Test Method for Compressive Properties of Rigid Plastics	ASTM D695
Standard Test Method for Coefficient of Linear Thermal Expansion of Plastics Between -30°C and 30°C with a Vitreous Silica Dilatometer	ASTM D696
Standard Test Method for Shear Strength of Plastics by Punch Tool	ASTM D732
Standard Test Method for Brittleness Temperature of Plastics and Elastomers by Impact	ASTM D746
Standard Test Method for Coated Fabrics – Breaking Strength (Sections 11-16) Procedure A - Grab Test Method and Procedure B - Cut Strip Test Method	ASTM D751
Standard Test Method for Rockwell Hardness of Plastics and Electrical Insulating Materials (M, R, and E scales)	ASTM D785
Standard Test Method for Determination of Relative Viscosity of Polyamide (PA)	ASTM D789
Standard Test Method for Flexural Properties of Unreinforced and Reinforced Plastics and Electrical Insulating Materials	ASTM D790
Standard Test Method for Density and Specific Gravity (Relative Density) of Plastics by Displacement	ASTM D792
Standard Test Method for Tensile Properties of Thin Plastic Sheeting	ASTM D882
Standard Test Method for Peel or Stripping Strength of Adhesive Bonds	ASTM D903
Standard Test Method for Apparent Shear Strength of Single-Lap- Joint Adhesively Bonded Metal Specimens by Tension Loading (Metal-to-Metal)	ASTM D1002
Standard Test Method for Haze and Luminous Transmittance of Transparent Plastics	ASTM D1003
Standard Test Method for Initial Tear Resistance of Plastic Film and Sheeting	ASTM D1004



Test Description	Test Standard
Standard Test Method for Linear Dimensional Changes of Nonrigid Thermoplastic Sheeting or Film at Elevated Temperature	ASTM D1204
Standard Test Method for Melt Flow Rates of Thermoplastics by Extrusion Plastometer	ASTM D1238
Standard Test Method for Vicat Softening Temperature of Plastics	ASTM D1525
Standard Test Method for Compressive Properties of Rigid Cellular Plastics	ASTM D1621
Standard Test Method for Apparent Density of Rigid Cellular Plastics	ASTM D1622
Standard Test Method for Environmental Stress-Cracking of Ethylene Plastics	ASTM D1693
Standard Test Method for Tensile Properties of Plastics by Use of Microtensile Specimens	ASTM D1708
Standard Test Method for Impact Resistance of Plastic Film by the Free-Falling Dart Method	ASTM D1709
Standard Test Method for Brittleness Temperature of Plastic Sheeting by Impact	ASTM D1790
Standard Test Method for Static and Kinetic Coefficients of Friction of Plastic Film and Sheeting	ASTM D1894
Standard Test Method for Propagation Tear Resistance of Plastic Film and Thin Sheeting by Pendulum Method	ASTM D1922
Standard Test Method for Tear-Propagation Resistance (Trouser Tear) of Plastic Film and Thin Sheeting by a Single-Tear Method	ASTM D1938
Standard Test Methods for Rubber Property-Brittleness Point of Flexible Polymers and Coated Fabrics	ASTM D2137
Standard Test Method for Rubber Property-Durometer Hardness	ASTM D2240
Standard Practice for Calculation of Color Tolerances and Color Differences from Instrumentally Measured Color Coordinates	ASTM D2244
Standard Test Method for Short-Beam Strength of Polymer Matrix Composite Materials and Their Laminates	ASTM D2344/2344M
Standard Practice for Xenon Arc Exposure of Plastics Intended for Outdoor Applications	ASTM D2565
Standard Test Method for Indentation Hardness of Rigid Plastics by Means of a Barcol Impressor	ASTM D2583
Standard Test Method for Ignition Loss of Cured Reinforced Resins	ASTM D2584
Standard Test Method for Void Content of Reinforced Plastics (Method A)	ASTM D2734
Standard Test Method for Measuring the Minimum Oxygen Concentration to Support Candle-Like Combustion of Plastics (Oxygen Index)	ASTM D2863

Test Description	Test Standard
Standard Test Method for Tensile Properties of Polymer Matrix Composite Materials	ASTM D3039/3039M
Standard Test Method for Determining Strength of Adhesively Bonded Rigid Plastic Lap-Shear Joints in Shear by Tension Loading	ASTM D3163
Standard Test Method for Chipping Resistance of Coatings	ASTM D3170
Standard Test Method for Constituent Content of Composite Materials	ASTM D3171 (Procedures A, B, C, D, E, G)
Standard Test Method for Peel Adhesion of Pressure Sensitive Tape	ASTM D3330/3330M
Standard Test Method for Blocking Load of Plastic Film by the Parallel Plate Method	ASTM D3354
Standard Test Method for Compressive Properties of Polymer Matrix Composite Materials with Unsupported Gage Section by Shear Loading	ASTM D3410/3410M
Standard Test Method for Transition Temperatures of Polymers by Differential Scanning Calorimetry	ASTM D3418
Standard Test Method for In-Plane Shear Response of Polymer Matrix Composite Materials by Tensile Test of a +/- 45 Degree Laminate	ASTM D3518/3518M
Standard Test Method for High Speed Puncture Properties of Plastics Using Load and Displacement Sensors	ASTM D3763
Standard Test Method for Measuring the Comparative Burning Characteristics of Solid Plastics in a Vertical Position	ASTM D3801
Standard Test Method for Determination of Properties of Polymeric Materials by Means of a Capillary Rheometer	ASTM D3835
Standard Test Method for Abrasion Resistance of Organic Coatings by the Taber Abraser	ASTM D4060
Standard Test Method for Impact Resistance of Rigid Poly (Vinyl Chloride) (PVC) Building Products	ASTM D4226
Standard Practice for Fluorescent UV Exposure of Plastics	ASTM D4329
Standard Practice for Xenon-Arc Exposure of Plastics Intended for Indoor Applications	ASTM D4459
Standard Practice for Fluorescent UV-Condensation Exposures of Paint and Related Coatings	ASTM D4587
Standard Test Method for Unnotched Cantilever Beam Impact Strength of Plastics	ASTM D4812
Standard Test Method for Plastics: Dynamic Mechanical Properties: In Flexure (Three-Point Bending)	ASTM D5023
Standard Test Method for Plastics: Dynamic Mechanical Properties: In Tension	ASTM D5026

Test Description	Test Standard
Standard Test Method for Measuring the Comparative Burning Characteristics and Resistance to Burn-Through of Solid Plastics Using 125-mm Flame	ASTM D5048
Standard Test Method for Horizontal Burning Rate of Polymeric Materials Used in Occupant Compartments of Motor Vehicles	ASTM D5132
Standard Test Method for Moisture Absorption Properties and Equilibrium Conditioning of Polymer Matrix Composite Materials	ASTM D5229/5229M
Standard Test Method for Shear Properties of Composite Materials by the V-Notched Beam Method	ASTM D5379/5379M ¹
Standard Test Method for Plastics: Dynamic Mechanical Properties: In Flexure (Dual Cantilever Beam)	ASTM D5418
Standard Test Method for Impact Resistance of Flat, Rigid Plastic Specimen by Means of a Striker Impacted by a Falling Weight (Gardner Impact)	ASTM D5420
Standard Test Method for Ash Content in Thermoplastics	ASTM D5630
Standard Test Method for Open-Hole Tensile Strength of Polymer Matrix Composite Laminates	ASTM D5766/5766M
Standard Test Method for Determining the Charpy Impact Resistance of Notched Specimens of Plastics	ASTM D6110
Standard Test Method for Flexural Properties of Unreinforced and Reinforced Plastics and Electrical Insulating Materials by Four- Point Bending	ASTM D6272
Standard Test Method for Open-Hole Compressive Strength of Polymer Matrix Composite Laminates (Procedure B)	ASTM D6484/6484M ¹
Standard Test Method for Compressive Properties of Polymer Matrix Composite Materials Using a Combined Loading Compression (CLC) Test Fixture	ASTM D6641/D6641M
Standard Practice for Filled-Hole Tension and Compression Testing of Polymer Matrix Composite Laminates	ASTM D6742/6742M (Compression ¹ and Tension)
Standard Test Method for Coulometric and Volumetric Determination of Moisture in Plastics Using the Karl Fischer Reaction (the Reaction of Iodine with Water)	ASTM D6869
Standard Test Method for Glass Transition Temperature (DMA Tg) of Polymer Matrix Composites by Dynamic Mechanical Analysis (DMA)	ASTM D7028
Standard Test Method for Shear Properties of Composite Materials by V-Notched Rail Shear Method	ASTM D7078/7078M ¹
Standard Test Method for High Speed Puncture Properties of Plastic Films Using Load and Displacement Sensors	ASTM D7192
Standard Test Method for Flexural Properties of Polymer Matrix Composite Materials	ASTM D7264/7264M

Test Description	Test Standard
Standard Test Method for Assignment of the DSC Procedure for Determining Tg of a Polymer or an Elastomeric Compound	ASTM D7426
Standard Practice for Calculating Yellowness and Whiteness Indices from Instrumentally Measured Color Coordinates	ASTM E313
Standard Test Method for Enthalpies of Fusion and Crystallization by Differential Scanning Calorimetry	ASTM E793
Standard Test Method for Linear Thermal Expansion of Solid Materials by Thermomechanical Analysis	ASTM E831
Standard Test Method for Compositional Analysis by Thermogravimetry	ASTM E1131
Standard Practice for General Techniques for Obtaining Infrared Spectra for Qualitative Analysis	ASTM E1252
Standard Test Method for Determining Specific Heat Capacity by Differential Scanning Calorimetry	ASTM E1269
Standard Test Method for Color and Color-Difference Measurement by Tristimulus (Filter) Colorimetry	ASTM E1347
Standard Test Method for Assignment of the Glass Transition Temperatures by Differential Scanning Calorimetry	ASTM E1356
Standard Test Method for Assignment of the Glass Transition Temperature by Thermomechanical Analysis	ASTM E1545
Standard Test Method for Assignment of the Glass Transition Temperature by Dynamic Mechanical Analysis	ASTM E1640
Standard Test Method for Seal Strength of Flexible Barrier Materials	ASTM F88/88M
Standard Test Method for Slow Rate Penetration Resistance of Flexible Barrier Films and Laminates	ASTM F1306
Standard Test Methods for Hot Seal Strength (Hot Tack) of Thermoplastic Polymers and Blends Comprising the Sealing Surfaces of Flexible Webs	ASTM F1921/1921M
Standard Practices for Making Heatseals for Determination of Heatsealability of Flexible Webs as Measured by Seal Strength	ASTM F2029
Standard Practice for Exposing Nonmetallic Materials in Accelerated Test Devices that Use Laboratory Light Sources	ASTM G151
Standard Practice for Operating Fluorescent Light Apparatus for UV Exposure of Nonmetallic Materials	ASTM G154
Standard Practice for Operating Xenon Arc Light Apparatus for Exposure of Non-Metallic Materials	ASTM G155
Rubber, Vulcanized or Thermoplastic - Determination of Tear Strength - Part 1: Trouser, Angle and Crescent Test Pieces - Method A Using Trouser Test Piece	ISO 34-1

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Test Description	Test Standard
Rubber, Vulcanized or Thermoplastic - Determination of Tear Strength - Part 1: Trouser, Angle and Crescent Test Pieces - Method B Using an Angle Test Piece, with or without a Nick of Specified Depth	ISO 34-1
Rubber, Vulcanized or Thermoplastic - Determination of Tensile Stress-Strain Properties	ISO 37
Plastics - Determination of Water Absorption	ISO 62
Plastics - Determination of Temperature of Deflection Under Load	ISO 75
Determination of Flexural Properties	ISO 178
Plastics - Determination of Charpy Impact Properties - Part 1: Non- Instrumented Impact Test	ISO 179-1
Plastics - Determination of Izod Impact Strength	ISO 180
Rubber, Vulcanized or Thermoplastic - Accelerated Aging and Heat Resistance Tests	ISO 188
Plastics - Standard Atmospheres for Conditioning and Testing	ISO 291
Plastics - Thermoplastic Materials - Determination of Vicat Softening Temperature (VST)	ISO 306
Plastics - Determination of Tensile	ISO 527-1, -2, -4, -5
Plastics - Determination of Compressive Properties	ISO 604
Rubber, Vulcanized or Thermoplastic - Determination of Compression Set at Ambient, Elevated or Low Temperatures	ISO 815-1
Plastics and Ebonite - Determination of Indentation Hardness by Means of a Durometer (Shore Hardness)	ISO 868 (Shore A & D)
Plastics - Determination of the Brittleness Temperature by Impact	ISO 974
Plastics - Determination of the Melt Mass-Flow Rate (MFR) and the Melt Volume-Flow Rate (MVR) of Thermoplastics	ISO 1133
Textile-Glass-Reinforced Plastics - Prepregs, Moulding Compounds and Laminates - Determination of the Textile-Glass and Mineral- Filler Content - Calcination Methods (Method A)	ISO 1172
Plastics - Methods for Determining the Density of Non-Cellular Plastics - Part 1: Method A Immersion Method	ISO 1183-1
Rubber, Vulcanized - Determination of the Effect of Liquids	ISO 1817
Plastics - Determination of Hardness - Part 2: Rockwell Hardness (M, R, E Scales)	ISO 2039-2
Plastics - Determination of Ash	ISO 3451-1, -2, -4, -5
Road Vehicles, and Tractors and Machinery for Agriculture and Forestry - Determination of Burning Behaviour of Interior Materials	ISO 3795
Plastics - Determination of Burning Behaviour by Oxygen Index Part 2: Ambient-Temperature Test	ISO 4589-2



Test Description	Test Standard
Plastics - Methods of Exposure to Laboratory Light Sources - Part 2: Xenon Arc Lamps	ISO 4892-2
Plastics - Methods of Exposure to Laboratory Light Sources - Part 3: Fluorescent UV Lamps	ISO 4892-3
Determination of Tear Resistance - Part 2: Elmendorf Method	ISO 6383-2
Plastics - Determination of Puncture Impact Behaviour of Rigid Plastics - Part 2: Instrumented Impact Testing	ISO 6603-2
Plastics - Determination of Dynamic Mechanical Properties - Part 4: Tensile Vibration - Non-Resonance Method	ISO 6721-4
Plastics - Determination of Dynamic Mechanical Properties - Part 5: Flexural Vibration - Non-Resonance Method	ISO 6721-5
Plastics Film and Sheeting - Determination of Impact Resistance by the Free-Falling Dart Method - Part 1: Staircase Methods	ISO 7765-1
Plastics Film and Sheeting - Determination of Impact Resistance by the Free-Falling Dart Method - Part 2: Instrumented Puncture Test	ISO 7765-2
Plastics - Differential Scanning Calorimetry (DSC)	ISO 11357
Plastics - Thermogravimetry (TG) of Polymers - General Principles	ISO 11358-1
Plastics - Thermomechanical Analysis (TMA)	ISO 11359
Plastics - Determination of the Fluidity of Plastics Using Capillary and Slit-Die Rheometers	ISO 11443
Fibre-Reinforced Plastic Composites - Determination of Flexural Properties	ISO 14125
Fibre-Reinforced Plastic Composites - Determination of Compressive Properties in the In-Plane Direction	ISO 14126
Fibre-Reinforced Plastic Composites - Determination of the In- Plane Shear Stress/Shear Strain Response, Including the In-Plane Shear Modulus and Strength by the Plus or Minus 45 Degree Tension Test Method	ISO 14129
Plastics - Determination of Water Content Method B Water Vaporization (Method B)	ISO 15512
Code of Federal Regulations Title 49: Transportation CFR Part 571 Federal Motor Vehicle Standards Section 302 Flammability of Interior Materials also Identified as FMVSS 302	49 CFR 571.302; FMVSS 302
Interior Odor Test	Ford FLTM BO131-03
Test for Thermal-Oxidative Stability Characteristics of Plastics	GM9059P ² (inactive 2012)
Determining the Resistance to Odor Propagation of Interior Materials	GMW3205
Chemical Resistance to Fluids	GMW 14334

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Test Description	Test Standard
Method of Test for Volume Resistivity and Surface Resistivity of Solid Electrical Insulating Materials	IEC 60093 ² (withdrawn 2015)
Electrical Strength of Insulating Materials - Test Method - Part 1: Tests at Power Frequencies	IEC 60243
Recommended Method for the Determination of the Permittivity and Dielectric Dissipation Factor of Electrical Insulating Materials at Power, Audio and Radio Frequencies Including Metre Wavelengths	IEC 60250 ² (withdrawn 2018)
Dielectric and Resistive Properties of Solid Insulating Materials - Part 3-1: Determination of Resistive Properties (DC Methods) - Volume Resistance and Volume Resistivity - General Method	IEC 62631-3-1
Dielectric and Resistive Properties of Solid Insulating Materials - Part 3-2: Determination of Resistive Properties (DC Methods) - Surface Resistance and Surface Resistivity	IEC 62631-3-2
Test Procedure for Packaging Materials - Test Method 2065 Puncture Resistance	MIL-STD-3010C
Flammability of Polymeric Interior Materials - Horizontal Test Method	SAE J369
Test for Chip Resistance of Surface Coatings	SAE J400
Hot Odor Test for Insulation Materials	SAE J1351
Accelerated Exposure of Automotive Interior Trim Components Using a Controlled Irradiance Water Cooled Xenon-Arc Apparatus	SAE J1885:2005 ² (withdrawn 2008)
Accelerated Exposure of Automotive Exterior Materials Using a Controlled Irradiance Water-Cooled Xenon Arc Apparatus	SAE J1960:2004 ² (withdrawn 2008)
Accelerated Exposure of Automotive Exterior Materials Using a Fluorescent UV and Condensation Apparatus	SAE J2020
Standard Method for Determining Continuous Upper Temperature Resistance of Elastomers	SAE J2236
Accelerated Exposure of Automotive Interior Trim Components using a Controlled Irradiance Xenon-Arc Apparatus	SAE J2412
Accelerated Exposure of Automotive Exterior Material Using a Controlled Irradiance Xenon-Arc Apparatus	SAE J2527
Test for Flammability of Plastic Materials for Parts in Devices and Appliances	UL-94

¹ "US Customary" fixture only

² This 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.



Accredited Laboratory

A2LA has accredited

INTERTEK PLASTICS TECHNOLOGY LABORATORIES, INC.

Pittsfield, MA

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 4th day of May 2021.

Vice President, Accreditation Services For the Accreditation Council Certificate Number 0619.01

Valid to February 28, 2023