



SCOPE OF ACCREDITATION TO ISO/IEC 17025:2017

ADVANCED COMPOSITES, INC. – TENNESSEE FACILITY¹
3050 Sidco Drive
Nashville, TN 37204
Todd Fannin Phone: 615 244 8994

MECHANICAL

Valid To: January 31, 2022

Certificate Number: 1957.01

In recognition of the successful completion of the A2LA evaluation process, accreditation is granted to this laboratory at the location listed above as well as the satellite laboratory location listed below to perform the following tests on plastics:

<u>Test Description</u>	<u>Test Method(s)</u>
Izod Pendulum Impact Resistance	ASTM D256; ISO 180
Conditioning Plastics for Testing	ASTM D618
Tensile Properties	ASTM D638; ISO 527-1, -2
Deflection Temperature Under Flexural Load	ASTM D648 (Method B); ISO 75-1, -2
Rockwell Hardness (Scale R)	ASTM D785
Flexural Properties	ASTM D790; ISO 178
Density and Specific Gravity	ASTM D792 (Method A); ISO 1183-1 (Method A)
Melt Flow Rate	ASTM D1238; ISO 1133-1
Durometer Hardness (D)	ASTM D2240
High Speed Puncture Properties	ASTM D3763; ISO 6603-2
Ash Content	ASTM D5630 (Procedure B); ISO 3451-1 (Method A)
Charpy Impact	ISO 179-1

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<u>Test Description</u>	<u>Test Method(s)</u>
Colorfastness to Burnt Gas Fumes	AATCC TM 23
Izod Pendulum Impact Resistance	ASTM D256; ISO 180
Specular Gloss	ASTM D523
Conditioning Plastics for Testing	ASTM D618; ISO 291
Tensile Properties	ASTM D638; ISO 527-1, -2
Deflection Temperature Under Flexural Load	ASTM D648 (Method B); ISO 75-1, -2
Flexural Properties	ASTM D790; ISO 178
Density and Specific Gravity	ASTM D792 (Method A); ISO 1183-1 (Method A)
Melt Flow Rate	ASTM D1238; ISO 1133-1
Color Measurement by Data Color, CIE, XYZ, L-A-B, and Transmittance	ASTM D2244
Thermal Oxidative Stability	ASTM D3012; ISO 4577
Accelerated Ageing and Heat Resistance Tests	ISO 188
Transitional Temperatures and Enthalpies of Fusion, Crystallization, and Specific Heat Capacity of Polymers by Differential Scanning Calorimetry	ASTM D3418; ISO 11357-1, -3, -4
High Speed Puncture Properties	ASTM D3763; ISO 6603-2
Ash Content in Thermoplastics	ASTM D5630 (Procedure B); ISO 3451-1 (Method A)
Coefficient of Linear Thermal Expansion with a Push-Rod Dilatometer	ASTM E228
Linear Thermal Expansion of Solid Materials by Thermomechanical Analysis	ASTM E831; ISO 11359-1, -2
Thermogravimetric Analysis	ASTM E1131; ISO 11358-1
Water Resistance	FLTM BI 104-01 (Method C)
Paint Adhesion	FLTM BI 106-01 (Method D)
Hydrolysis Resistance	FLTM BI 106-03
Ford Thermal Shock Test for Coating Adhesion	FLTM BI 107-05

Test Description**Test Method(s)**

Ford Water and Soap Spotting/Horizontal Chemical Resistance	FLTM BI 113-01
Ford Vertical Chemical Resistance	FLTM BI 168-01
Environmental Cycling	FLTM BQ 104-07 (Procedure 1)
Determining the Resistance to Odor Propagation of Interior Materials	FLTM BO 131-03; GMW3205; LP-463KC-09-01
Fogging Characteristics of Trim Materials	GMW 3235; SAE J1756
Moisture Cold-Cycle	GMW14124
GM Resistance to Fuels	GMW14333
GM Chemical Resistance	GMW14334
GM Sunscreen and Insect Repellent Resistance	GMW14445
Resistance to Scratch and Mar	GMW14688; PV 3952
High Humidity Test	GMW14729
Tape Adhesion	GMW14829
Determination of Volatile and Semi-Volatile Organic Compounds for Vehicle Interior Materials	GMW15634
GM Determining Cure of Painted Plastic Substrates	GMW15891
GM Thermal Shock Test for Coating Adhesion	GMW15919
GM Water Jet Tests	GMW16745-B
Accelerated Exposure of Automotive Interior Trim Components/Exterior Materials Using a Controlled Irradiance Xenon Arc Apparatus	ISO 105-B06; SAEJ1885/J2412; SAE J1960/J2527; FLTM BO 116-01; ASTM D7869-13; TSM0501G
Charpy Impact	ISO 179-1
Mold Shrinkage	ISO 294-4
Film Thickness Measurement - Paint	ISO 2808 (5.4.4.2)
Flammability, Interior Materials	ISO 3795; GMW3232; SAE J369; 49 CFR 571.302 (FMVSS 302)
High Strain Rate Tensile Testing of Polymers	ISO 18872; SAE J2749
Determination of Emission of Organic Compounds	PV 3341
Chip Resistance	SAE J400; GMW14700

¹This accreditation covers testing performed at all laboratory locations listed in this scope of accreditation.

