



SCOPE OF ACCREDITATION TO ISO/IEC 17025:2005

ADVANCED COMPOSITES, INC. – TENNESSEE FACILITY¹
3050 Sidco Drive
Nashville, TN 37204
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MECHANICAL

Valid To: January 31, 2020

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 |
| Mold Shrinkage | ISO 294-4 |
| Flammability, Interior Materials | ISO 3795; GMW3232; SAE J369; 49 CFR 571.302 (FMVSS 302) |

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

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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 |
| Durometer Hardness (D) | ASTM D2240 |
| 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 and Crystallization of Polymers by Differential Scanning Calorimetry | ASTM D3418; ISO 11357-1, -3 |
| 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 |
| Water Resistance | FLTM BI 104-01 |
| Paint Adhesion | FLTM BI 106-01 Method D |



Test Description**Test Method(s)**

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| Hydrolysis Resistance | FLTM BI 106-03 |
| Ford Thermal Shock Test for Coating Adhesion | FLTM BI 107-05 |
| Ford Water & 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 |
| Moisture Cold-Cycle | GMW14124 |
| GM Resistance to Fuels | GMW14333 |
| GM Chemical Resistance | GMW14334 |
| GM Sunscreen & Insect Repellant 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) |
| Determination of Emission of Organic Compounds | PV 3341 |
| Chip Resistance | SAE J400; GMW14700 |

