



SCOPE OF ACCREDITATION TO ISO/IEC 17025:2017

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MECHANICAL

Valid To: December 31, 2025

Certificate Number: 0079.01

In recognition of the successful completion of the A2LA evaluation process, accreditation is granted to this laboratory to perform the following tests on Plastics, Rubber, Foams, Paper/Paperboard, Composites, Textiles, Leather, Adhesives, Paints, Organic Coatings and Finishes, Vinyl, Polyvinyl Chloride Coated Fabrics and Sheets, Plastic Roll Goods, Exterior and Interior Trim Parts and Panels, Seating Materials, and related materials:

Test:

Test Method:

Abrasion:

| | |
|----------------------|---|
| Gakushin | HES D6511 Section 4.12; JIS L0849; NES M0602 Sections 20-22 |
| Martindale / Pilling | ASTM D4966; Ford FLTM BN 108-03, FLTM BN 108-14, FLTM BN 158-01; GMW15651; ISO 5470-2, ISO 12945-2, ISO 12947-1, ISO 12947-2; VDA 230-210 |
| RCA | ASTM F2357-10, ASTM F3152; GM9304P (1988); Nissan NES M0136 |
| Seatbelt | FMVSS 209 S5.1(d) |
| Stolle | ASTM D3886; Ford FLTM BN 108-01, FLTM BN 112-01 (1990) |
| Taber | ASTM D1044, ASTM D3884, ASTM D4060, ASTM G195; CFFA-1 b, CFFA-200 b; Chrysler LP-463KB-21-01; Ford FLTM BN 108-02; GM9337P (1998), GM9515P (1988); GMW3208; Honda HES D6506, HES D6507; ISO 5470-1; SAE J948, SAE J1530, SAE J1847, SAE Z26.1 |

Test:**Test Method:**

Abrasion (cont'd):
Wyzenbeek

ASTM D4157;
CFFA-1 a, CFFA-200a;
Chrysler LP-463KB-06-01, LP-463KC-22-01;
GM9082P (1988), GM 9222P (1988);
SAE J948, SAE J1530

Chemical Stress Resistance

Ford FLTM BO 127-03, FLTM BO 158-03,
GM9308P (1995);
ISO 4599, ISO 22088-3;
Rivian RTS.2422

Chip Resistance /
Gravelometer

ASTM D3170;
GMW14700;
SAE J400

Color Evaluation

AATCC TM 173, AATCC EP1, AATCC EP2, AATCC EP8,
(AATCC Evaluation Procedures 1, 2, and 8);
ASTM D2244, ASTM E313;
ISO 105-A02, ISO 105-A03;
SAE J1545, SAE J1767

Compression

ASTM D395, ASTM D695, ASTM D1056, ASTM D1621,
ASTM D1667, ASTM D3574, ASTM D3575;
Ford FLTM BN 015-06, FLTM BN 115-07, FLTM BO 013-02,
FLTM BO 111-01, FLTM BO 111-02, FLTM BO 113-03,
FLTM BO 113-04;
Honda HES D6002;
ISO 604, ISO 815, ISO 844, ISO 1856, ISO 3386;
Nissan NES M0142;
SAE J1352

Conditioning

ASTM D618;
GMW3221;
ISO 291;
JIS Z8703

Crocking

AATCC TM 8;
CFFA-7;
Ford FLTM BN 107-01, FLTM BN 107-02;
GM9033P (2013);
ISO 105-X12, ISO 20433;
Rivian RTS.1750
SAE J861

Density / Weight

ASTM D297 (Hydrostatic Method), ASTM D751, ASTM D792,
ASTM D1056, ASTM D1475, ASTM D3574, ASTM D3575,
ASTM D3776, ASTM D3887;
CFFA-20, CFFA-21, CFFA-220, CFFA-700;
Chrysler LP-463LB-07-01, LP-463NB-15-01;
Ford FLTM BN 106-01;
GMW3182;
Honda HES D6002, HES D6506;
ISO 171, ISO 845, ISO 1183-1 (Method A), ISO 2286-2, ISO 9073-1;
Nissan M7081;
SAE J315, SAE J860

Test:**Test Method:**

| | |
|------------------------------|---|
| Filler | ASTM D586, ASTM D2584, ASTM D5630 (Method B); Ford FLTM BO 006-01, FLTM BO 006-02, FLTM BV 150-10, FLTM BV 150-12; ISO 1172, ISO 3451, ISO 6964 |
| Film Thickness | ASTM D4138 (Procedure A); GM9518P (1988); ISO 2808 (Methods 6A-1, 6B) |
| Flammability | ASTM D6413; BMW GS97038; Chinese GB 8410; Chrysler MS-JP-9; DIN 75200; Fiat 7-G2000; FMVSS 302, CMVSS302; Ford FLTM BN 024-02; ES-E97B-1011014-AA; Fuji/Subaru TS 420-00-002; GM6090M (1989); GMW3232; Honda HES C206, HES D6003; Hyundai/Kia MS-300-08; ISO 3795; Mazda MES CF050C; Mercedes DBL5307.10; Mitsubishi ES-X60410; Nissan NES M0094, NES M0142; Rivian RTS.1733; SAE J369; Toyota BSDM 0500, TSM 0500G; Volkswagen TL 1010; Volvo 104-0001 |
| Flex | ASTM D790, ASTM D2097, ASTM D4475, ASTM D4476, ASTM D6182; CFFA-10, CFFA-11; Ford FLTM BN 002-03, FLTM BN 102-02, FLTM BN 162-01; GM9216P (1993); Honda HES D6501; ISO 178, ISO 5485, ISO 5402, ISO 14125; Jaguar Land Rover TPJLR.52.413; SAE J949; Toyota BSDM 0501, TSM 0501G, |
| Flex Fold | Chrysler LP-463KB-28-01 (Method A and C), LP- 463LB-9-01; Ford FLTM BN 102-04 |
| Fluid Immersion / Extraction | ASTM D471, ASTM D629, ASTM D870, ASTM D896, ASTM D1667; CFFA-25; Chrysler LP-463TB-13-01, LP-A0659, Coast Guard CGD 77-145; Ford FLTM BI 104-01, FLTM BO 130-01, FLTM BO 157-01, FLTM BO 008-05, FLTM BP 010-01, FLTM BP 117-01, GM9146P (1988), GM9514P (2003); Honda HES D2008 ¹ , HES D6501; ISO 175, ISO 1817, ISO 6427, ISO 6916-1 (Annex E); SAE J913 |

Test:**Test Method:**

Fogging

ASTM D5393-93;
Chrysler LP-463DB-12-01;
DIN 75201;
Ford FLTM BO 116-03 (1990);
Fuji/Subaru TS 420-00-032;
GMW3235;
Honda HES D6508;
Hyundai/Kia MS-300-54;
ISO 6452;
Mazda MES MN401;
Mitsubishi ES-X83217, ES-X83231;
Nissan NES M0161, NES M7081;
Rivian RTS.1755;
SAE J1756;
Toyota BSDM 0503, TSM 0503G;
Volkswagen PV 3015;
Volvo 420-0003

Friction

ASTM D1894;
Chrysler LP-463KB-29-01;
Ford FLTM BN 014-03, FLTM BP 003-02;
ISO 8295

Gloss / Haze / Transmittance

ASTM C584, ASTM D523, ASTM D1003, ASTM D1455;
Ford FLTM BI 110-01, FLTM BI 010-02;
Honda HES D6501;
ISO 2813

Hardness

ASTM D785 (R Scale), ASTM D2240 (Shore A, D), ASTM D3363;
Ford FLTM BI 151-01;
Honda HES D6501;
ISO 868, ISO 2039-2, ISO 7619-1;
Nissan NES M0142

HDT (Heat Deflection
Temperature) / VICAT /
SOFT POINT

ASTM D648 (Method B), ASTM D1525;
ISO 75, ISO 306;
Toyota BSDM 0501, TSM 0501G

Humidity / Autoclave
Exposures

ASTM D1735, ASTM D2247, ASTM D3574 Test J, ASTM D4585;
CFFA-110;
Ford FLTM BO 012-01, FLTM BQ 104-02;
GM9215P (1988);
GMW14124 Cycle T, GMW14357, GMW14729;
Honda HES D2008¹, HES D6501;
ISO 2440, ISO 6270-2, CH;
Rivian RTS.1743, RTS.2792;
SAE J1389

Impact

Charpy / Izod /
Pendulum

ASTM D256, ASTM D4812, ASTM D6110;
DIN 53453;
GMW14093,
ISO 179, ISO 180;
Rivian RTS.1776;
Toyota TSM 0501G

Test:**Test Method:**

Impact (cont'd)

Falling Weight

ASTM D1790, ASTM D5420;
CFFA-23;
Chrysler LP-463KB-28-01-B (Method B), LP-463NB-13-01;
Ford FLTM BI 108-01, FLTM BN 128-01, FLTM BO 117-02,
FLTM BO 151-01, FLTM BO 163-01, FLTM BV 101-01,
FLTM BV 101-02;
GM9011P (2014);
GMW14093, GMW14126, GMW14127, GMW17141;
Honda HES D2500, HES D6501;
Nissan NES M0134;
Rivian RTS.1776;
SAE J323;
Volkswagen PV3905

Multiaxial

ASTM D3763;
GM9904P (2011);
GMW17895;
ISO 6603-1, ISO 6603-2

Infrared Scan

ASTM D2124, ASTM E168, ASTM E1252 (Section 9.0);
GM9740P (1988)

Low Temperature Brittleness

ASTM D746, ASTM D751 (Section 60), ASTM D1912, ASTM D2137;
CFFA-6;
Chrysler LP-463DD-7-01, LP-463-LB-11-01;
Ford FLTM BN 102-01 (Method A), FLTM BU 152-04;
ISO 812, ISO 974;
SAE J323 (Method A)

Melt Flow

ASTM D1238, ASTM D3364;
Ford FLTM BO 021-01;
ISO 1133, ISO 4440

Moisture Content

ASTM D6869;
Ford FLTM BI 102-01, FLTM BI 120-08, FLTM BO 024-02;
GMW14777;
ISO 960 (Method A), ISO 15512 (Method B1);
SAE J315

Moisture Vapor
Transmission

ASTM E96;
CFFA-19;
Ford FLTM BU 001-01, FLTM BU 001-02;
GM9450P

Odor

ASTM D4339;
Chrysler LP-463KC-09-01;
Ford FLTM BO 131-03;
Fuji/Subaru TS300-00-001;
GME 60276 (1978);
GMW3205;
Honda HES D6507;
Hyundai/Kia MS-300-34;
PV3900;
Rivian RTS.1754;
SAE J1351;

Test:**Test Method:**

Odor (cont'd)

Toyota BSDM 0505 (*excluding water extraction*),
TSM 0505G (*excluding water extraction*);
VDA 270;
Volvo 429-0001;

Oven / Exposure Cycle

ASTM D573, ASTM D751, ASTM D1056, ASTM D1509,
ASTM D3012, ASTM D3045, ASTM D3574, ASTM D3575;
Chrysler LP-463CB-10-01, LP-463DD-8-02, LP-463KC-15-01,
LP-463LB-12-01, LP-463LB-13-01, LP-463PB-22-01,
LP-463PB-36-01, LP.7M070;
Ford FLTM BI 107-02, FLTM BN 113-02, FLTM BN 113-03,
FLTM BO 015-03, FLTM BQ 104-07, FLTM BO 040 Procedure B,
FLTM BO 115-01, FLTM BO 115-02, FLTM BU 105-01;
GM9131P (1994), GM9142P (2015), GM9200P (1988),
GM9231P (1999), GM9504P (2003), GM9758P (1998);
GMW3221, GMW3259, GMW14124, GMW14358;
Hyundai/Kia MS-210-05¹;
ISO 188, ISO 2578, ISO 4577, ISO 2440;
Nissan NES M0131, NES M0132, NES M0142;
Rivian RTS.1739, RTS.1741;
Tesla TP-0000706

Paint Adhesion

ASTM D3359, ASTM D5402;
Chrysler LP-463LB-19-01;
Ford FLTM BI 104-04, FLTM BI 106-01;
GM4489P (1997), GM9160P (2015), GM9502P (1988),
GM9506P (1988), GM9507P (1988);
GMW14333, GMW14829, GMW15891, GMW16745, GMW16746;
Honda HES D6501;
ISO 2409

Peel

ASTM D413, ASTM D751, ASTM D903, ASTM D1000,
ASTM D3330;
CFFA-3, CFFA-4, CFFA-201;
Chrysler LP-463AB-37-01, LP-463LB-10-01, LP-463TB-11-01;
Ford FLTM BN 113-01, FLTM BN 121-01, FLTM BN 151-05,
FLTM BO 101-06, FLTM BP 008-03;
GM9207P (1988), GM9210P, GM9758P (1998), GM9795P (1990),
GM9797P (2011);
GMN8170 (2002);
GMW3220, GMW14132, GMW14695;
Honda HES D6511;
ISO 2411, ISO 5978, ISO 6133, ISO 8033, ISO 8510-2, ISO 11644;
Magna WI-7145;
SAE J912, SAE J1600 (1987), SAE J1907

Plastic (General)

Honda HES D2500, HES D2501, HES D2502;
ISO 1923, ISO 4591;
Toyota BSDM 0501, TSM 0501G

Test:**Test Method:**

Salt Spray / Corrosion

ASTM B117, ASTM B368, ASTM D1654, ASTM D2059;
Fiat 50180;
Ford FLTM BI 004-03, FLTM BI 103-01, FLTM BQ 007-02,
FLTM BQ 105-01;
GMW3286, GMW14458, GMW15282, GMW16862;
Honda HES D6501;
ISO 4611, ISO 4628-1, ISO 4628-2, ISO 4628-3, ISO 4628-8,
ISO 9227;
Nissan NES M0140, NES M4063 (Section 4.5.2);

Scuff / Mar

Chrysler LP-463DD-18-01, LP-463PB-54-01;
Ford FLTM BN 108-04, FLTM BN 108-10, FLTM BN 108-13,
FLTM BO 162-01;
GMW14125 (Appendix F and H), GMW14130, GMW14698;
Rivian RTS.2007, RTS.3125;
SAE J365;
Volvo 1024 3113

Seam Strength

ASTM D751, ASTM D1117, ASTM D1683;
Chrysler LP-463KB-13-01, LP-A1325;
Ford FLTM BN 106-02, FLTM BN 119-01;
GMW3405, GMW14145;
Honda HES D6506, HES D6511;
ISO 13935;
Jaguar/Land Rover TPJLR.S2.414

Shear Strength / Shear
Modulus

ASTM D732, ASTM D3163, ASTM D3164, ASTM D3846,
ASTM D4065, ASTM D5279, ASTM E1640;
Chrysler LP-463CB-1-02, LP-463CB-8-01;
Ford FLTM BV 101-06;
ISO 4587;
SAE J1523, SAE J1525

Shrinkage / Dimensional
Stability

ASTM D955, ASTM D1204;
CFFA-22, CFFA-140;
Chrysler LP-463TB-10-01, LP-463TB-12-01;
Ford FLTM BN 105-01, FLTM BN 105-03, FLTM BO 129-01;
GMW4217, GMW14777;
ISO 294-4, ISO 2796;
Nissan NES M0602;
SAE J315, SAE J883, SAE J1717

Soil / Cleanability

CFFA-70;
Chrysler LP-463KC-04-02, LP-463KC-04-03, LP-463KC-04-04;
Ford FLTM BN 110-02, FLTM BN 112-03;
GM9156P (1989);
GMW15377;
Hyundai/Kia MS-210-05;
ISO 26082-1

Test:

Test Method:

Stain

AATCC TM 15, AATCC TM 23, AATCC TM 107, AATCC TM 118;
ASTM D925 (Methods A and B), ASTM D1712, ASTM D1913;
CFFA-100, CFFA-141, CFFA-142;
Chrysler LP-463DD-06-01, LP-463KC-01-01, LP-463KC-03-01,
LP-463KC-04-01, LP-463KC-21-01, LP-463LB-05-01,
LP-463-NB-14-01, LP-463-PB-31-01, LP-463PB-57-02,
LP-463PB-57-03, LP-463TB-1-01, 7.M0021;
Ford FLTM AN 101-01, FLTM AN 102-01, FLTM BI 113-01,
FLTM BI 113-02, FLTM BI 113-05, FLTM BI 113-07,
FLTM BI 113-08, FLTM BI 168-01, FLTM BN 103-01, FLTM BN 112-08,
FLTM BO 061-01, FLTM BO 101-05, FLTM BO 112-06,
FLTM BP 153-01;
GM9214P (1988), GM9240P (1988), GM9317P (1996),
GM9517P (1988), GM9689P (2014);
GMW3402, GMW4726, GMW14102, GMW14131, GMW14141,
GMW14296, GMW14334, GMW14445, GMW14864;
ISO 105-G02, ISO 2812-4, ISO 3865 (Method A, B.1 and B.2),
ISO 14419, ISO 15701;
Nissan NES M0133, NES M0142;
Rivian RTS.1661, RTS.1769;
SAE J322, SAE J1326;
Tesla TP-0000703;
VDA 230-223

Stiffness

ASTM D747;
Chrysler LP-463KB-25-01;
Ford FLTM BN 157-01, FLTM BN 157-02;
GMW3390, GMW16190;
ISO 17235

Stretch and Set

CFFA-15;
GMW3211;
Honda HES D6506, HES D6511;
SAE J855

Tear Strength:

Die "C"

ASTM D624, ASTM D1004;
CFFA-26 a;
ISO 34

Elmendorf

ASTM D751, ASTM D1117, ASTM D1424, ASTM D1922,
ASTM D5734 (2008);
CFFA-16 a, CFFA-26 b;
ISO 6383

Stitch

ASTM D4705;
GM9149P (2015)

Tongue

ASTM D751, ASTM D1117, ASTM D1938, ASTM D2261;
CFFA-16 b;
Chrysler LP-463KB-3-01;
Honda HES D6511;
ISO 4674-1 (Method B), ISO 6383, ISO 8067, ISO 13937-2

Test:

Test Method:

Tear Strength: (cont'd)

Trapezoid

ASTM D751, ASTM D1117, ASTM D4533, ASTM D5587,
ASTM D5733-99;
CFFA-16 c;
Chrysler LP-463KB-3-01;
GMW3326;
Honda HES D6506;
ISO 9073-4

Tensile

ASTM D412, ASTM D461, ASTM D638, ASTM D751,
ASTM D882, ASTM D1056, ASTM D1117, ASTM D2208,
ASTM D2209, ASTM D2211, ASTM D2256, ASTM D3574,
ASTM D3575, ASTM D3759, ASTM D3826, ASTM D4632,
ASTM D5034, ASTM D5035;
CFFA-17, CFFA-27;
Chrysler LP-463KB-2-01, LP-463KB-22-01;
DIN 53504;
Ford FLTM BN 013-07, FLTM BN 150-04,
GMN6753 (2012);
GMW3010, GMW14148;
Honda HES D6506, HES D6507, HES D6511;
ISO 37, ISO 527, ISO 1184, ISO 1421, ISO 1798, ISO 1926,
ISO 2062, ISO 9073-3, ISO 13934;
Nissan NES M0142;
Toyota BSDM 0501, TSM 0501G

Textile Construction

ASTM D737, ASTM D751, ASTM D1777, ASTM D1813,
ASTM D3774, ASTM D3775, ASTM D3882, ASTM D3887,
ASTM F778;
CFFA-220, CFFA-700;
Chrysler LP-463KB-14-01, LP-463LB-7-01;
DIN 53855;
Ford FLTM BN 108-08;
GMW3387, GMW4089, GMW4090;
Honda HES D6506;
ISO 2286-3, ISO 2589, ISO 5084, ISO 9073-2 (Method A);
NES M7081;
SAE J882

Thermal Analysis

Differential
Scanning
Calorimetry (DSC)

ASTM D3418, ASTM D3895, ASTM D5028, ASTM E793,
ASTM E794, ASTM E1269, ASTM E1356;
GM9094P (1988);
ISO 3146:1985 (Method C), ISO 11357-1, ISO 11357-2,
ISO 11357-3

Thermogravimetric
Analysis (TGA)

ASTM D3850, ASTM E1131;
ISO 6964, ISO 11358-1

Thermomechanical
Analysis (TMA) /
Thermal Expansion

ASTM D696, ASTM E831, ASTM E1545;
Fiat 50560;
GMW18467;
ISO 11359-1, ISO 11359-2, ISO 11359-3

| <u>Test:</u> | <u>Test Method:</u> |
|--|---|
| Thermal Shock | Chrysler LP-463PB-64-01, LP.7M061; Ford FLTM BI 107-05; GMW15919; |
| Viscosity | ASTM D789 (Section 9.3), ASTM D1200, ASTM D2196; Ford FLTM BI 102-03, FLTM BI 111-01; ISO 307, ISO 1628 |
| Volatile Loss | ASTM D1203; CFFA-18, CFFA-270; Chrysler LP-463DD-4-01; Honda HES D6511; ISO 176 |
| Warpage | Ford FLTM BO 029-03, Ford FLTM BS 002-01; SAE J315 |
| Water Absorption | ASTM D570, ASTM D1815, ASTM D2842; FLTM BO 129-02; GMW14777; ISO 62; SAE J315 |
| Weathering | |
| Carbon Arc (Fadeometer, Single Arc, Twin Arc, Sunshine, XW) | AATCC TM 16.2; ASTM D822, ASTM D1499, ASTM D5031, ASTM G152, ASTM G153; GM9125P (1991); Honda HES D6501, HES D6511; ISO 4892-1, ISO 4892-4; JIS D0205; Nissan NES M0135, NES M0142; Toyota TSL 0601G Methods A |
| Xenon | ASTM D2565, ASTM D4355, ASTM D4459, ASTM D5071, ASTM D7869, ASTM G155; CFFA-2 Method a and b; Fiat 50451/01 (Method A); Ford FLTM BN 017-02, FLTM BN 117-01, FLTM BN 117-03, FLTM BO 116-01; GM9125P (1991); GMW14162 (Method D); ISO 105-B06 (Procedure 5), ISO 4892-1, ISO 4892-2; Nissan NES M0135; SAE J1885 (2005), SAE J1960 (2004), SAE J2412, SAE J2527; Tesla TP-0000701; Toyota TSL 0601G Methods E |
| Wrinkling | Chrysler LP-463KB-24-01, LP-463-KB-32-01; GM9143P (2015) |

¹ *The laboratory is accredited for the test methods listed above. The accredited test methods are used in determining compliance with any material specifications included on this Scope; however, the inclusion of these material specifications on this Scope does not confer laboratory accreditation to the material specifications. Inclusion of these material specifications on this Scope also does not confer accreditation for every method embedded within the specification. Only the methods listed above on this Scope are accredited.*

WSS-M15P45-C, WSS-M1F21-D1, WSS-M1F22-D1, WSS-M1F25-B, WSS-M1F27-D1, WSS-M1F27-D3, WSS-M1F28-D1, WSS-M1F28-D3, WSS-M1F32-A1, WSS-M1F34-A1, WSS-M2F156-C, WSS-M2F156-C4, WSS-M2F186-A1, WSS-M2F186-A2, WSS-M2F186-A3, WSS-M2F186-A4, WSS-M2F212-A1, WSS-M2F212-A4, WSS-M8P3-E3, WSS-M8P3-F1, WSS-M8P3-F2, WSS-M98P12-C2, WSS-M99P43-E1, WSS-M99P43-E2, GMW14122, GMW16440, GMW3262, MES MN 405, NES M7081, NES M7109, MS-13474, MS-JF-1000, MS-JK-3000, MS-JK-3600, MS-JK-4000, MS-JK-4100, MS-JP-1-3, CFFA-Healthcare-201B, CFFA-U-201G, CFFA-Marine/Vinyl-201D, CFFA-P-101G, CFFA-Marine/PU-101C



Accredited Laboratory

A2LA has accredited

GHESQUIERE PLASTIC TESTING, INC.

Harper Woods, MI

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 23RD day of February 2024.

A blue ink signature of Trace McInturff, written in a cursive style.

Mr. Trace McInturff, Vice President, Accreditation Services
For the Accreditation Council
Certificate Number 0079.01
Valid to December 31, 2025
Revised February 26, 2024

For the tests to which this accreditation applies, please refer to the laboratory's Mechanical«field» Scope of Accreditation.