SCOPE OF ACCREDITATION TO ISO/IEC 17025:2005

GHESQUIERE PLASTIC TESTING, INC.
20450 Harper Avenue
Harper Woods, MI 48225
Douglas Leggat Phone: 313 885 3535
Fax: 313 885 1771
E-mail: doug@gptesting.com

MECHANICAL

Valid To: December 31, 2019 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 automotive tests on Plastics, Rubber, Foams, Paper/Paperboard, Composites, Textiles, Leather, Adhesives, Paints, and related materials:

Test:	**Test Method:**
Abrasion:	
Falling Sand	ASTM D968; GM 9542P (8/89)[2]
Gakushin	JIS L0849
Martindale	ASTM D4966; Ford FLTM BN 158-01; GMW 15651; VDA 230-210
RCA	ASTM F2357; GM 9304P; GMW 3431 (Paragraph 4.3.14.1); Nissan NES M0136
Scrape	ISO 6722-1
Seatbelt	FMVSS 209 S5.1(d)
Stolle	ASTM D3886; Ford FLTM BN 108-01, BN 112-01 (9/90) [2]
Taber	ASTM D1044, D3884, D4060; Chrysler LP463-KB-21-01; Ford FLTM BN 108-02; GM 9337P, 9515P (9/88) [2]; GMW 3208; Honda HES D6506, D6507; SAE J948, J1530, J1847
Wyzenbeek	ASTM D4157; Chrysler LP463-KB-6-01; LP463-KC-22-01; GM 9082P (11/88) [2], 9222P, 9516P (9/88) [2]; SAE J948, J1530

Test:	**Test Method:**
Chemical Stress Resistance	ASTM D896, D1693; Ford FLTM BO 101-05, BO 127-03, BO 130-01, BO 158-03, BP 008-05, BI 113-08; GM 9308P (7/95) [2]; GMW 14334, 14445; ISO 4599, 22088-3; SAE J2016 (11/99) [2]; Tesla TP-0000703
Chip Resistance / Gravelometer	ASTM D3170; Chrysler LP463-PB-52-01; GM 9508P (6/02) [2]; GMW 14700; SAE J400
Cleanability	Chrysler LP463-KC-04-01, KC-04-02, KC-04-03; Ford FLTM BN 112-03, BN 112-08; GM 9126P (12/02)[2], 9156P, 9900P (8/02)[2]; GMN 10059 (4/13)[2]; GMW 3402, 14334, 15377; Hyundai/Kia MS-210-05[1]; ISO 26082-1; Nissan NES M0133
Color Evaluation	AATCC TM 173 (Evaluation Procedures 1, 2, and 8); ASTM D1003, D2244, E313; DIN 54001; Ford FLTM BN 107-02; GM 9101P (1/13)[2]; ISO 105-A02, 105-A03; SAE J1545, J1767
Compression	ASTM D395, D695, D1056, D1621, D1667, D3574, D3575; DIN 53457, 53517, 53577; Ford FLTM BN 015-06, BN 115-07, BO 013-02, BO 111-01, BO 111-02, BO 113-03, BO 113-04; Honda HES D6002; ISO 604, 815, 844, 1856, 3386; Nissan NES M0142; SAE J1352
Conditioning	ASTM D618; GMW 3221; ISO 291; JIS Z8703
Crocking	AATCC TM 8; Chrysler LP463-PB-54-01; Ford FLTM BN 107-01; GM 9033P (7/13)[2]; GMW 3274; ISO 105-X12, 20433; SAE J861
Density / Weight	ASTM D297 (Hydrostatic Method s. 16.3), D792, D1056, D1475, D3574, D3575, D3776; Chrysler LP463-NB-15-01; DIN 53420, 53479 (Method A);

Test:	**Test Method:**
Density / Weight (cont'd)	Honda HES D6002; ISO 171, 845, 1183-1 (Method A); SAE J315, J860
Filler	ASTM D586, D1278, D1506, D1603, D2584, D4218, D5630 (Method B); DIN EN 60; Ford FLTM BO 006-01, BO 006-02, BV 150-10, BV 150-12; GM 9010P (3/11) [2], 9077P (9/88) [2], 9194P (7/88) [2]; ISO 1172, 3451, 6964
Film Thickness	ASTM D4129 (Procedure A); Ford FLTM BI 117-01; GM 9518P (7/88) [2]; ISO 2808 (Methods 6A-1, 6B)
Flammability	ASTM D635, D3801, D5132, D6413; BMW GS97038; California Technical Bulletin 117 (Section A, Part III); Chinese GB 8410; Chrysler MS-JP9-4; DIN 75200; Fiat 7-G2000; FMVSS 302; Ford FLTM BN 024-02; ES-E97B-1011014-AA; Fuji/Subaru TS 420-00-002 GM 6090M (4/89)[2], 9070P (9/11)[2]; GMW 3232; Honda HES D6003; Hyundai/Kia MS-300-08; ISO 1326, 3795; Mazda MES CF050C; Mercedes DBL5307.10; Mitsubishi ES-X60410; Nissan NES M0094, M0142; SAE J369; Toyota TSM 0500G; Volkswagen TL 1010; Volvo 104-0001
Flex	ASTM D790, D2097, D4475, D4476, D6182; DIN 53452, 53457; Ford FLTM BN 002-03, BN 102-02, BN 102-04, BN 162-01; GM 9143P (6/15)[2], 9216P; GMW 3390; Honda HES D6501; ISO 178, 5402, 14125; Jaguar Land Rover TPJLR.52.413; SAE J949; Toyota TSM 0501G
Flex Fold	Chrysler LP463-KB-28-01-A, KB-28-01-C, LB-9-01; Ford FLTM BN 102-04, BO 113-04
Fluid Immersion / Extraction	ASTM D471, D570, D629, D870, D1667, D1815, D2842; Chrysler LP463-PB-31-01, TB-1-01, TB-13-01, PB-57-03 Coast Guard CGD 77-145;

Test:	**Test Method:**
Fluid Immersion / Extraction (cont'd)	Ford FLTM BI 104-01, BO 029-03, BO 129-02, BO 157-01, BP 010-01, BP 117-01, BS 004-02, BS 104-01; GM 9454P (7/10)[2], 9514P (2/03)[2]; Honda HES D2008[1], D6501; ISO 62, 175, 1817, 6427, 6916-1 (Annex E); SAE J913
Fogging	ASTM D1003, D5393-93; Chrysler LP463-DB-12-01; DIN 75201; Ford FLTM BO 116-03 (7/90)[2]; Fuji/Subaru TS 420-00-032 GM 9305P (1/92)[2]; GMW 3235; Honda HES D6508; Hyundai/Kia MS-300-54; ISO 6452; Mazda MES MN401; Mitsubishi ES-X83217, ES-X83231; Nissan NES M0161, M7081; SAE J1756; Toyota TSM 0503G; Volkswagen PV 3015; Volvo 420-0003
Friction	ASTM D1894; Chrysler LP463-KB-29-01; Ford FLTM BN 014-03, BP 003-02; ISO 8295
Fungus / Mildew	AATCC TM 30 (Parts II, III); ASTM D5590, G21; Chrysler LP463KB-34-01; Ford FLTM BN 012-03; GM 9128P (9/88)[2], 9215P, 9303P (9/88)[2], 9328P (11/89)[2]; GMW 3259, 16124, 16128; ISO 846; MIL STD 810C; Nissan NES M0076
Gloss	ASTM C584, D523, D1455; Chrysler LP463-PB-11-01; Ford FLTM BI 110-01, BI 010-02; Honda HES D6501
Hardness	ASTM D785 (Scales R, M), D2134, D2240 (Shore A, D), D3363; DIN 53505; Ford FLTM BI 112-01, BI 151-01; GM 9053P (4/89) [2]; Honda HES D6501; ISO 868, 2039-2; Nissan NES M0142
HDT (Heat Deflection Temperature) / VICAT / SOFT POINT	ASTM D648 (Method B), D1525; Chrysler LP463-TB-14-01; ISO 75, 306; Toyota TSM 0501G

Test:	Test Method:
Humidity	ASTM D1735, D2247, D4585; Ford FLTM BQ 104-02; GM 4465P (7/95)[2], 9329P (2/03)[2]; GMW 14729; Honda HES D2008[1], D6501
Impact	ASTM D256, D1709, D1822, D3763, D4812, D5420, D5628, D6110; Chrysler LP463-KB-28-01-B, NB-13-01, TB-9-01; DIN 53453; Ford FLTM BI 108-01, BO 117-02, BO 151-01, BO 163-01, BV 101-01, BV 101-02; GM 9011P (7/14)[2], 9032P (10/88)[2], 9140P (4/04)[2], 9300P (6/01)[2], 9302P (3/14)[2], 9528P (7/94)[2], 9904P (1/11)[2]; GMW 14093; Honda HES D2500, D6501; ISO 179, 180, 6603-1, 6603-2, 7765; Nissan NES M0134; Toyota TSM 0501G (Section 8.4); Volkswagen PV3905
Infrared Scan	ASTM D2124, E168, E1252 (Section 9.0); GM 9740P (9/88) [2]
Low Temperature Brittleness	ASTM D746, D751 (Section 60), D1329, D1790, D1912, D2137; Chrysler LP463-DD-7-01, LB-11-01; Ford FLTM BI 107-02, BN 102-01 (Method A), BN 128-01, BU 152-04; GMW 14126, 14127; ISO 812, 974; SAE J323 (Method A)
Melt Flow	ASTM D1238, D3364; Ford FLTM BO 021-01; ISO 1133, 4440
Melt Point	ASTM D3418; Ford FLTM BO 021-02; GM 9094P (11/88) [2]; ISO 1218 (Method B)
Minking / Pilling	Chrysler LP463-KB-37-01; Ford FLTM BN 108-03, BN 108-14
Moisture Content	ASTM D6869; Ford FLTM BI 102-01, BI 120-08, BO 024-02; ISO 960 (Method A), 15512 (Methods A and B); SAE J315
Moisture Vapor Transmission	ASTM E96; Ford FLTM BU 001-01, BU 001-02; GM 9450P
Odor	ASTM D4339; Chrysler LP463-KC-9-01; Ford FLTM BO 131-01, BO 131-03; Fuji/Subaru TS300-00-001 GM 9130P (6/15)[2];

Test:	**Test Method:**
Odor (cont'd)	GME 60276; GMW 3205; Honda HES D6507; Hyundai/Kia MS-300-34; SAE J1351; Toyota TSM 0505G (excluding water extraction); VDA 270; Volvo 429-0001
Oven / Exposure Cycle	ASTM D573, D751, D1056, D1509, D3012, D3045, D3574, D3575; Chrysler LP463-CB-10-01, DD-8-02, KC-15-01, LB-12-01, LB-13-01, PB-22-01, PB-36-01; Ford FLTM BN 113-02, BN 113-03, BO 012-01, BQ 104-07; GM 9059P (10/88)[2], 9131P, 9142P (6/15)[2], 9200P, 9231P, 9310P (9/88)[2], 9504P (2/03)[2], 9505P (10/05 except cycle J)[2], 9758P (3/98)[2]; GMW 3221, 14124; Hyundai/Kia MS-210-05[1]; ISO 183, 188, 2578, 2796, 4577; Nissan NES M0131, M0132, M0142
Ozone	ASTM D1149, D1171; Fiat 50417; Ford FLTM BP 101-01; GM 2724M (Paragraph 3.14) (6/12)[2], 4486P (7/95) [2]; ISO 1431-1, 7326
Paint Adhesion	ASTM D3359, D5402; Chrysler LP463-LB-19-01; Ford FLTM BI 104-04, BI 106-01; GM 4489P (6/97) [2], 9071P (8/02) [2], 9160P (6/15)[2], 9500P (11/88) [2], 9501P (3/97[2]), 9502P (11/88) [2], 9503P (6/12)[2], 9506P (11/88) [2], 9507P (9/88) [2], 9509P (10/12)[2], 9531P (6/12)[2]; GMW 14333, 14829, 15891, 16745, 16746; Honda HES D6501; ISO 2409
Peel Test	ASTM D413, D751, D903, D1000, D3330; Chrysler LP463-AB-37-01, LB-10-01, TB-3-01, TB-11-01; Ford FLTM BN 113-01, BN 151-05, BO 101-06, BP 008-03; GM 9207P (9/88)[2], 9210P, 9758P (3/98)[2], 9795P (3/90)[2], 9797P (3/11)[2]; GMW 3220, 14132; Honda HES D6511; ISO 6133, 8033, 8510-2; Magna WI-7145; SAE J912, J1553, J1600 (4/87) [2], J1907
Plastic (General)	GM 7400M[1], 7451M[1], 7452M[1]; Honda HES D2500, D2501, D2502; ISO 1923, 4591; Toyota TSM 0501G
Salt Spray / Corrosion	ASTM B117, B368, D1654, D2059; Fiat 50180; Ford FLTM BI 004-03, BI 103-01, BQ 007-02, BQ 105-01, BU 106-01; GM 4298P (12/10)[2], 4476P (6/97)[2], 9102P (12/10)[2], 9511P (12/10)[2];

Test:	Test Method:
Salt Spray / Corrosion (cont'd)	GMW 3286, 14458, 15282, 16862; Honda HES D6501; ISO 4611, 4628-1, 4628-2, 4628-3, 4628-8, 9227; Nissan NES M0140, M4063 (Section 4.5.2); SAE J1389
Scuff / Mar	Chrysler LP463-DD-18-01, PB-54-01, PF-10938; Ford FLTM BN 108-04, BN 108-10, BN 108-13, BO 162-01; GM 9150P (10/04) [2]; GMN 3943; GMW 14130, 14698; SAE J365; Volvo 1024 3113
Seam Strength	ASTM D751, D1117, D1683, D4884; Ford FLTM BN 106-02, BN 119-01; GM 9129P (7/15)[2]; GMW 3405; Honda HES D6506, D6511 Jaguar/Land Rover TPJLR.S2.414
Shear Strength	ASTM D732, D2344, D3163, D3164, D3846; Chrysler LP463-CB-1-02, CB-8-01; Ford FLTM BV 101-06; ISO 4585, 4587, 6237, 6238; SAE J1523, J1525
Shrinkage / Dimensional Stability	ASTM D955, D1204; Chrysler LP463-TB-10-01, TB-12-01; Ford FLTM BN 005-02, BN 105-01, BN 105-03, BO 129-01; GM 9452P (12/10)[2]; GMW 4217; ISO 294-4; Nissan NES M0602 SAE J315, J883, J1717
SO_2 (Kesternich)	ASTM G87; DIN 50018; ISO 6988
Stain	AATCC TM 15, TM 23, TM 107, TM 118; ASTM D925 (Methods A and B), D1712, D1913; Chrysler LP463-DD-6-01, KC-1-01, KC-3-01, NB-14-01, PB-57-02; LP463-KC-21-01 Ford FLTM AN 101-01, AN 102-01, BI 113-01, BI 113-02, BI 113-03 (3/01), BI 113-05, BI 113-07, BN 103-01, BO 112-06, BP 115-01, BP 153-01, BU 105-01, BV 107-01; GM 4357P, 9027P (9/88)[2], 9069P (9/88)[2], 9133P, 9141P, 9198P, 9214P (9/88)[2], 9240P (9/88)[2], 9317P, 9517P (11/88)[2], 9689P (6/14)[2], 9736P (7/88)[2], 9902P; GMN 8170, 10033; GMW 14069 (8/05) [2], 14102, 14131, 14141, 14296, 14445, 14864, 15891; ISO 105-G02, 15701; 3865 (Method A, B.1 and B.2) Nissan NES M0142; SAE J322, J1326

Test:	**Test Method:**
Stiffness	ASTM D747, D1053; Chrysler LP463-KB-25-01; Ford FLTM BN 120-01, BN 157-01; GM 9151P (6/15)[2]; GMW 16190; ISO 17235
Tear Strength:	
Die "C"	ASTM D624, D1004; ISO 34
Elmendorf	ASTM D751, D1117, D1424, D1922, D5734 (2008)[2]; ISO 6383
Stitch	ASTM D4705; GM9149P (6/15)[2]
Tongue	ASTM D751, D1117, D1938, D2261; Chrysler LP463-KB-3-01; DIN 53507; Honda HES D6511; ISO 4674-1 (Method B), 6383, 8067, 13937-2
Trapezoid	ASTM D1117, D4533, D5587, D5733-99; Chrysler LP463-KB-3-01; GMW 3326; Honda HES D6506
Tensile	ASTM D412, D461, D638, D751, D882, D1056, D1117, D2208, D2209, D2211, D2256, D3574, D3575, D3826, D4632, D5034, D5035; Chrysler LP463-KB-2-01, KB-22-01; DIN 53455, 53457, 53504, 53571, 53857; Ford FLTM BN 013-07, BN 121-01, BN 150-04, BP 116-01; GM 9127P (9/88) [2], 9774P (8/13)[2]; GMN 6753; GMW 3010, 3211, 14148, 14695; Honda HES D6506, D6507, D6511; ISO 37, 527, 1184, 1421, 1798, 1926, 2062, 3268, 6239, 13934; Nissan NES M0142; SAE J855; Toyota TSM 0501G
Textile Construction	ASTM D737, D1777, D1813, D2061, D3774, D3775, D3776, D3882, F778; Chrysler LP463-KB-14-01, LB-7-01; DIN 53584, 53855; Ford FLTM BN 106-01, BN 108-08; GM 9132P, 9146P; GMW 3182, 3387, 4089, 4090, 4141, 4726, 14777; Honda HES D6506; ISO 2286-2, 2286-3, 2589, 5084, 9073-1, 9073-2 (Method A); SAE J882
Thermal Analysis	ASTM D3418, D3795, D3850, D3895, D4065, D4440, D4473, D5028, D5279, E793, E794, E1131, E1269, E1356, E1640; GM 9094P (11/88)[2];

Test:	**Test Method:**
Thermal Analysis (cont'd)	ISO 3146:1985[2] (Method C), 11357, 11358, 11359
Thermal Expansion	ASTM D696, E831, E1545; Fiat 50560
Thermal Shock	Chrysler LP463-PB-64-01; Ford FLTM BI 107-05; GM 9525P (9/88) [2]; GMW 15919; Hyundai/ Kia MS-210-05[1]
Viscosity	ASTM D789 (Section 9.3), D1200, D2196; Ford FLTM BI 102-03, BI 111-01; ISO 307, 1628
Volatile Loss	ASTM D1203; Chrysler LP463-DD-4-01, NA-1-01; Honda HES D6511; ISO 176
Warpage	Ford FLTM BS 002-01; SAE J315
WOM / Fade / UV	AATCC TM 16 (Options 1 and 2), TM 111A; ASTM D822, D1499, D2565, D4355, D4459, D5031, D5071, D5208, D7869, G23 (1996)[2], G26 (1996)[2], G53 (1996)[2], G152, G153, G154, G155; Chrysler LP463 KB-12-01; Fiat 50451/01 (Method A), 50471/01; Ford FLTM BN 017-02, BN 117-01, BN 117-03, BO 015-03, BO 101-01, BO 115-01, BO 115-02, BO 116-01; DVM-0067-MA; GM 9125P (7/91) [2], 9327P (1/11)[2]; GMW 14162 (Method D); Honda HES D6501, D6511; ISO 105-B06 (Procedure 5), 4892; JIS D0205; Nissan NES M0135, M0142; SAE J1885 (3/05)[2], J1960 (10/04) [2], J2020, J2412, J2527; Toyota TSL 0601G (Methods A and E)
Wrinkling	Chrysler LP463-KB-24-01

[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.*

[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

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 17025:2005 *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 8 January 2009*).

Presented this 15th day of December 2017.

President and CEO
For the Accreditation Council
Certificate Number 0079.01
Valid to December 31, 2019

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