



SCOPE OF ACCREDITATION TO ISO/IEC 17025:2017

LABORATORIO CENTRAL DE BADER DE MEXICO¹
Bader de Mexico
Sigma 209, Industrial Delta
Leon, Guanajuato C.P. 37545 MEXICO
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MECHANICAL

Valid To: December 31, 2026

Certificate Number: 1700.01

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 two satellite laboratories listed below to perform the following tests on automotive upholstery leather:

Test(s):

Test Method(s):

Fastness Tests

Colorfastness of Leather to Light (Xenon Lamp)

DIN EN ISO 105-B06;
DBL 5310 item 12, DBL 5471 item 7;
MBN 55555-5 Item 5.3

Colorfastness of Leather to Artificial Light (Weather-Ometer)

GMW 14162; HES-D6601

Colorfastness of Leather to Perspiration

DIN EN ISO 105-E04; DBL 5310 item 9

Colorfastness of Leather in Respect of Staining
Plasticized Polyvinyl Chloride (PVC)

ISO 15701

Colorfastness to To and Fro Rubbing

ISO 11640; DBL5310 item 10; PAPP PWT
7328

Adhesion of Finish

ISO 11644; DBL 5310 item 11; GMW
15717;
8102Z-TJB-A000 6.2.12

Resistance to Sunscreen

MBN 55555-7 Item 5.2

Colorfastness to Crocking

AATCC 8; ISO 105-X12; GMW 3402
Method A;
8102Z-TJB-A000 6.2.5

Test(s):

Test Method(s):

Fastness Tests (cont'd)

Soiling and Cleanability

GMW 3402 Method B; AA-0419,
GMW15377 & TL 9169300.6 Sections
3.1.6, 3.5.5; VDA 230-212; DBL 5310 item
14 & 22, DBL 5399 item 7.24;
8102Z-TJB-A000 6.2.16, 6.2.17;
MBN 55555-3 Item 5.2

Resistance to Mildew

GMW 3259

Standard Test Method for Specular Gloss

ASTM D523

Standard Practice for Calculation of Color Tolerances
and Color Differences from Instrumentally Measured
Color Coordinates

ASTM D2244; DIN EN ISO 105-A05;
DBL 5310

Physical Tests

Measurement of Thickness

DIN EN ISO 2589, DIN EN ISO 5084,
DIN EN ISO 2286-3; ASTM D1813;
8102Z-TJB-A000 6.1.1

Finishing Thickness

ISO 17186

Thickness of Non-Wovens

EN ISO 9073-2, Method A

Measurement of Apparent Density
(Mass / Unit Area)

DIN EN ISO 2420, DIN EN ISO 12127;
ASTM D3776; GMW 3182

Measurement of Tensile Strength and Percentage
Elongation

DIN EN ISO 3376, DIN EN ISO 13934-1,
DIN EN ISO 527-3; GMW 3010; ASTM
D5034, ASTM D2208; 8102Z-TJB-A000
Section 6.1.2

Measurement of Flexing Endurance of Light Leathers
and their Surface Finishes

DIN EN ISO 5402-1

Resistance to Flex Cracking
(Scott Flex Machine)

8102Z-TJB-A000 6.2.3

Measurement of Water Vapor Permeability

DIN EN ISO 14268

Apparent Bending Modulus of Plastics and Depression
by Means of a Cantilever Beam

DIN 53362; GMW 3390, 14134; VDA 230-
209;
DIN EN ISO 17235; 8102Z-TJB-A000,
6.1.8; MBN 55555-6

Flex Testing of Finish on Upholstery Leather

ASTM D2097

Abrasion Resistance of Textile Fabrics
(Rotary Platform, Double-Head (Taber) Method)

ASTM D3884; ISO 17076; GMW 3208;
8102Z-TJB-A000, 6.2.6.1

Test(s):

Test Method(s):

Physical Tests (cont'd)

Abrasion Resistance of Textile Fabrics (Oscillatory Cylinder (Wyzenbeek) Method)	ASTM D4157; LP-463KB-06-01
Abrasion Resistance Gakushin Type Friction Tester	8102Z-TJB-A000 6.2.6
Determination of the Abrasion Resistance of Fabrics by the Martindale Method	DIN EN ISO 12947-1, -2; AA-0412; VDA 230-211
Measurement of Tear Strength	DIN EN ISO 3377-1; ISO 13937-2; 8102Z-TJB-A000 6.1.4
Determination of Stitch Tear Resistance	DIN EN ISO 23910; GMW 14146 (B)
Flammability of Interior Material	FMVSS 302; DIN 75200; DBL 5307 (item 6.1); BMW GS97038; GMW 3232; HES D6003; TL 1010, ISO 3795, VCS 5031,19, TSM0500G, MS-JP-9-4
Fogging Characteristics of Interior Automotive Material	SAE J1756 (Gravimetric); DIN 75201 (B); DIN EN 17071 (B); GMW 3235 (B); TSM0503G
Fogging (%-Haze) Method A	8102Z-TJB-A000 6.3.4; HES D6508
Hot Odor Test for Insulation Material	VDA 270; GMW 3205; DBL 5430 item 6.4; TSM0503G
Static Elongation (Stretch and Set)	GMW 3211; VW PV 3909; 98102Z-TJB-A000 6.1.6
Shrinkage, Dimensional Stability	TL 9 169 300.6 (AA-056, AA0568), TL52064 item 17.1 (PV 1200); DBL 5310 item 18; GMW14124; 8102Z-TJB-A000 6.1.7; MBN 55555-4 Item 5.4
Automotive Environmental Cycles	GMW 14124 Cycle M, R, S, and Q; DBL 5310 item 26; MBN 55555-4 Item 5.5 8102Z-TJB-A000 6.2.7 Moist Heat, 8102Z-TJB-A000 6.2.8 Humidity Resistance
Resistance to Cold Crack	GMW 14126, 14127; 8102Z-TJB-A000, 6.2.2; DBL 5306 Sections 7.1 and 7.2, DBL 5310 item 10
Heat Resistance Folding Exposure	DBL 5306 Section 6; MBN 55555-6 Item 5.12



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Sigma 209, Industrial Delta

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CALIBRATION

Valid To: December 31, 2026

Certificate Number: 1700.02

In recognition of the successful completion of the A2LA evaluation process (including an assessment of the organization's compliance with R205 – A2LA's Calibration Program Requirements), accreditation is granted to this laboratory to perform the following calibrations^{1,5}:

I. Dimensional

Parameter/Equipment	Range	CMC ^{2,4} (±)	Comments
Dial Indicators	Up to 125 mm 0.001 Resolution 0.01 Resolution 0.1 Resolution	(0.58 + 0.072L) μm (5.8 + 0.043L) μm (58 + 0.0061 L) μm	Gage blocks
Calipers	Up to 155 mm	(8.2 + 0.000 89L) μm	Gage blocks
Ruler	Up to 1000 mm	(46 + 0.021L) μm	Digital scale

II. Mechanical

Parameter/Equipment	Range	CMC ^{2,6} (±)	Comments
Gauge Pressure – Measure and Generate (Pneumatic)	(3 to 30) psi (30 to 295) psi	0.0088 psi 0.013 psi	GE druck

Parameter/Equipment	Range	CMC ² (±)	Comments
Scales ³	1 g 2 g 5 g 10 g 20 g 50 g 100 g 200 g 500 g 1 kg 2 kg 5 kg 10 kg 20 kg 30 kg 35 kg	0.092 mg 0.10 mg 0.12 mg 0.15 mg 0.18 mg 0.21 mg 0.35 mg 0.66 mg 1.7 mg 8.8 mg 11 mg 19 mg 88 mg 0.11 g 0.13 g 0.14 g	Class E2 and F1 weights

III. Thermodynamics

Parameter/Equipment	Range	CMC ^{2, 6} (±)	Comments
Temperature – Measuring Equipment ³	0 °C (0 to 120) °C (120 to 200) °C	0.045 °C 0.052 °C 0.076 °C	Fluke 1524 with 5616/5627 PRT/RTD with liquid baths or dry well
Relative Humidity – Measuring Equipment	11% RH 33% RH 75% RH 95% RH	1.2% RH 1.3% RH 1.4% RH 1.4% RH	Humidity chamber with salts and Vaisala humidity probe and readout.
Infrared Temperature – Measuring Equipment $\lambda = (8 \text{ to } 14) \mu\text{m}$	0 °C 50 °C 150 °C 230 °C	0.16 °C 0.22 °C 1.4 °C 3.1 °C	Fluke 1524 with 5616/5627 PRT/RTD with fluke 4180

¹ This laboratory offers commercial calibration service and field calibration service.

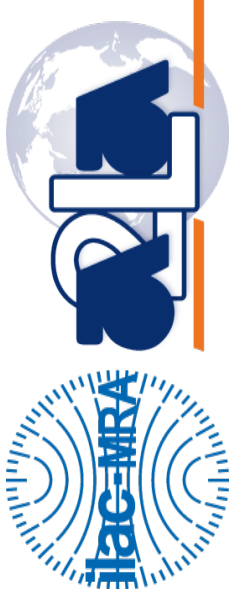
² Calibration and Measurement Capability Uncertainty (CMC) is the smallest uncertainty of measurement that a laboratory can achieve within its scope of accreditation when performing more or less routine calibrations of nearly ideal measurement standards or nearly ideal measuring equipment. CMCs represent expanded uncertainties expressed at approximately the 95 % level of confidence, usually using a coverage factor of $k = 2$. The actual measurement uncertainty of a specific calibration performed by the laboratory may be greater than the CMC due to the behavior of the customer's device and to influences from the circumstances of the specific calibration.

³ Field calibration service is available for this calibration. Please note the actual measurement uncertainties achievable on a customer's site can normally be expected to be larger than the CMC found on the A2LA Scope. Allowance must be made for aspects such as the environment at the place of calibration and for other possible adverse effects such as those caused by transportation of the calibration equipment. The usual allowance for the actual uncertainty introduced by the item being calibrated, (e.g. resolution) must also be considered and this, on its own, could result in the actual measurement uncertainty achievable on a customer's site being larger than the CMC.

⁴ In the statement of CMC, L is the numerical value of the nominal length of the device measured in mm.

⁵ This scope meets A2LA's *P112 Flexible Scope Policy*.

⁶ The type of instrument or material being calibrated is defined by the parameter. This indicates the laboratory is capable of calibrating instruments that measure or generate the values in the ranges indicated for the listed measurement parameter.



Accredited Laboratory

A2LA has accredited

LABORATORIO CENTRAL DE BADER DE MEXICO

Leon, Guanajuato, MEXICO

for technical competence in the field of

Calibration

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 laboratory also meets R205 – Specific

Requirements: Calibration Laboratory Accreditation Program. 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 17th day of April 2025.

A blue handwritten signature, likely belonging to Trace McInturf, the Vice President of Accreditation Services.

Mr. Trace McInturf, Vice President, Accreditation Services
For the Accreditation Council
Certificate Number 1700.02
Valid to December 31, 2026

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