



SCOPE OF ACCREDITATION TO ISO/IEC 17025:2017

LABORATORIO CENTRAL DE BADER DE MEXICO¹

Bader de Mexico

Sigma 209, Parque Industrial Delta
Leon, Guanajuato C.P. 37545 MEXICO
Juanita Landin Phone: 52 477 152 4615
Juanita.Landin@bader-leather.com

MECHANICAL

Valid To: December 31, 2024

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):

Fastness Tests

Colorfastness of Leather to Light (Xenon Lamp)

Test Method(s):

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):

Fastness Tests (cont'd)

Soiling and Cleanability

Test Method(s):

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

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

<u>Test(s):</u>	<u>Test Method(s):</u>
<u>Physical Tests (cont'd)</u>	
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

Test(s):**Physical Tests (cont'd)**

<u>Test Method(s):</u>
Water Vapor Permeability
Resistance to Seam Fatigue
Determination of Seam Strength
Blocking
Coefficient of Slide Friction
Stick Slip
Determination of Loose Grain Effect
Reflectance of Solar Radiation 980 nm
Separation Strength
Determination of Volatile Matter
Determination of Substances (Fats and Other Solubles) Soluble in Dichloromethane
Determination of Sulfated Total Ash and Sulfated Water Insoluble Ash
Determination of Chromic Oxide
Determination of pH Value and Difference Figure of an Aqueous Extract
Resistance to Water Spotting Penetration Behavior with Water and Paraffin
Oil Repellency
Chemical Resistance 1, 2, 3
Hydrogen Sulfide (H ₂ S), Sulfur Dioxide (SO ₂)
Visual Evaluation of Color Change by Grey Scale
Visual Evaluation of Staining by Grey Scale
GMW 14140
GMW 3405
8102Z-TJB-A000, 6.1.5
GMW 14132; SAE J912; 8102Z-TJB-A000 6.2.4
DBL 5306 Section 19.1.1 Method A; MBN 55555-6 Item 5.10
VDA 230-206
VDA 230-205
PAPP PWT 7333; DIN EN ISO 17502 B; PR 358
EN ISO 2411; GMW 3220
ISO 4684; PR362 BMW
DIN EN ISO 4048
EN ISO 4047
DIN EN ISO 5398-1
DIN EN ISO 4045
GMW 14102; AA0566
AATCC118; VDA 230-216
8102Z-TJB-A000 6-2-13, 6-2-14, 6-2-15; HES D6511
GMW14864; 8102Z-TJB-A000 6-2-10
ISO 105-A02; JIS L0804
ISO 105-A03; JIS L0805

Test(s):**Test Method(s):****Physical Tests (cont'd)**

Formaldehyde in Leather

DIN EN ISO 17226-2; DIN 53315; VDA 275;
VW PV 3925

Chromium VI determination

ISO 17075-1

Water & Wastewater Measurement

pH measurement in natural, waste and treated wastewater

NMX-AA-008-SCFI-2016

Temperature measurement in natural, waste and treated wastewater²

NMX-AA-007-SCFI-2013

Determination of turbidity in natural water, wastewater and treated wastewater

NMX-AA-038-SCFI-2001

Measurement of electrical conductivity in natural, waste and treated wastewater

NMX-AA-093-SCFI-2018

Determination of methylene blue active substances (SAAM) in natural, drinking, waste and treated wastewater

NMX-AA-039-SCFI-2001

Measurement of recoverable fats, oils, and grease in natural, waste and treated wastewater

NMX-AA-005-SCFI-2013

Measurement of settleable solids in natural, wastewater and treated wastewater

NMX-AA-004-SCFI-2013

Measurement of dissolved solids and salts in natural, waste and treated

NMX-AA-034-SCFI-2015

Determination of total chlorides in natural water, wastewater, and treated wastewater-

NMX-AA-073-SCFI-2001

Determination of total hardness in natural, waste, and treated wastewater

NMX-AA-072-SCFI-2001

¹This accreditation covers testing performed at the main laboratory listed above, and the following satellite laboratories listed below:

² This laboratory performs field testing activities for these tests.

LABORATORIO SECUNDARIO TABACHINES
Tabachines #201
Col. Unidad Obrera
Leon, Guanajuato C.P. 37179 MEXICO

Test(s):

Measurement of Thickness

Measurement of Apparent Density
(Mass / Unit Area)

Measurement of Tear Strength

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

Determination of Volatile Matter

Separation Strength

Determination of Loose Grain Effect

Permeability to Air

Flammability of Interior Material

Automotive Environmental Cycles

Test Method(s):

DIN EN ISO 2589, DIN EN ISO 5084,
DIN EN ISO 2286-3; ASTM D1813;
8102Z-TJB-A000 6-1-1

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

DIN EN ISO 3377-1; ISO 13937-2;
810Z-TJB-A000 6.1.4

DIN EN ISO 17235; 8102Z-TJB-A000,
6.1.8;
GMW 14134 (BLC ST300), GMW 3990;
DIN 53362

ISO 4684; PR362 BMW

EN ISO 2411; GMW 3220

VDA 230-205

ISO 9237

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

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

LABORATORIO SECUNDARIO JALISCO
Rita Pérez de Moreno #2030
Parque Industrial Colinas de Lagos
Lagos de Moreno Jalisco C.P. 47515 MEXICO

Test(s):

Measurement of Thickness

Measurement of Apparent Density
(Mass / Unit Area)

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

Determination of Loose Grain Effect

Separation Strength

Measurement of Tensile Strength and Percentage
Elongation

Test Method(s):

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

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

DIN EN ISO 17235; GMW 14134 (BLC
ST300), GMW 3990; 8102Z-TJB-A000,
6.1.8; DIN 53362

VDA 230-205

EN ISO 2411; GMW 3220

GMW 3010; ASTM D5034-06, ASTM
D2208; DIN EN ISO 3376, DIN EN ISO
13934-1, DIN EN ISO 2062, DIN EN ISO
527-3



Accredited Laboratory

A2LA has accredited

LABORATORIO CENTRAL DE BADER DE MEXICO

Leon, Guanajuato, Mexico

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 3rd day of July 2023.

A blue ink signature of the name "Mr. Trace McInturff".

Mr. Trace McInturff, Vice President, Accreditation Services
For the Accreditation Council
Certificate Number 1700.01
Valid to December 31, 2024

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