



SCOPE OF ACCREDITATION TO ISO/IEC 17025:2005

LABORATORIO CENTRAL DE BADER DE MEXICO<sup>1</sup>

Bader de Mexico  
Sigma 601, Parque Industrial Delta  
Leon, Guanajuato C.P. 37179 MEXICO  
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MECHANICAL

Valid To: December 31, 2018

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, DBL 5471 Section 5.4
Colorfastness of Leather to Artificial Light (Weather-Ometer)	GMW 14162; HES-D6601
Colorfastness of Leather to Perspiration	DIN EN ISO 105-E04
Colorfastness of Leather in Respect of Staining Plasticized Polyvinyl Chloride (PVC)	ISO 15701
Colorfastness to To and Fro Rubbing	ISO 11640; DBL5310; PAPP PWT 7328
Adhesion of Finish	ISO 11644; DC DBL 5310; GMW 15717; 8102Z-TJB-A000 6.2.12
Colorfastness to Crocking	AATCC 8; ISO 105-X12; GMW 3402 Method A; 8102Z-TJB-A000 6.2.5
Soiling and Cleanability	GMW 3402 Method B; AA-019, GMW15377 & TL 9169300.6 Sections 3.1.6, 3.5.5; VDA 230-212; DBL 5310 Sections 7.7 & 7.8, DBL 5399; 8102Z-TJB-A000 6.2.16, 6.2.17
Resistance to Mildew	GMW 3259
Standard Test Method for Specular Gloss	ASTM D523

**Test(s):**

**Test Method(s):**

Fastness Tests (cont'd)

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

ASTM D2244; DIN EN ISO 105-05; DBL 5310 Section 7.11

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

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

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 (Part 5.1); BMW GS97038; GMW 3232; HES D6003; TL 1010

**Test(s):**

**Test Method(s):**

Physical Tests (cont'd)

Fogging Characteristics of Interior Automotive Material0	SAE J1756 (Gravimetric); DIN 75201(B); DIN EN 17071 (B); GMW 3235 (B)
Fogging (%-Haze) Method A	8102Z-TJB-A000 6.3.4; HES D6508
Hot Odor Test for Insulation Material	VDA 270; GMW 3205
Static Elongation (Stretch and Set)	GMW 3211; VW PV 3909; 9102Z-TJB-A000 6.1.6
Shrinkage, Dimensional Stability	TL 9 169 300.6, TL52064; DBL 5310; GMW14124; 8102Z-TJB-A000 6.1.7
Automotive Environmental Cycles	GMW 14124 Cycle M, R, S, and Q; DBL 5310 Section 6.25; 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, 731
Heat Resistance Folding Exposure	DBL 5306 Section 6
Water Vapor Permeability	GMW 14140
Resistance to Seam Fatigue	GMW 3405
Determination of Seam Strength	8102Z-TJB-A000, 6.1.5
Blocking	GMW 14132; SAE J912; 8102Z-TJB- A000 6.2.4
Coefficient of Slide Friction	DBL 5306 Section 19.1.1 Method A
Stick Slip	VDA 230-206
Determination of Loose Grain Effect	VDA 230-205
Reflectance of solar radiation 980 nm	PAPP PWT 733; DIN EN ISO 17502 B; PR 358
Separation Strength	EN ISO 2411; GMW 3220
Determination of Volatile Matter	ISO 4684; PR362 BMW
Determination of Substances (Fats and Other Solubles) Soluble in Dichloromethane	DIN EN ISO 4048
Determination of Sulfated Total Ash and Sulfated Water Insoluble Ash	EN ISO 4047
Determination of Chromic Oxide	DIN EN ISO 5398-1

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

Determination of pH Value and Difference Figure of an Aqueous Extract	DIN EN ISO 4045
Resistance to Water Spotting Penetration Behavior with Water and Paraffin	GMW 14102; AA0566
Oil Repellency	AATCC118; VDA 230-216
Chemical Resistance 1, 2, 3	8102Z-TJB-A000 6-2-13, 6-2-14, 6-2-15; HES D6511
Hydrogen Sulfide (H <sub>2</sub> S), Sulfur Dioxide (SO <sub>2</sub> )	GMW14864; 8102Z-TJB-A000 6-2-10
Visual Evaluation of Color Change by Grey Scale	ISO 105-A02; JIS L0804
Visual Evaluation of Staining by Grey Scale	ISO 105-A03; JIS L0805
Formaldehyde in Leather	DIN EN ISO 17226-2; DIN 53315; VDA 275; VW PV 3925

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

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

**Test(s):****Test Method(s):**

Measurement of Thickness	DIN EN ISO 2589, DIN EN ISO 5084, DIN EN ISO 2286-3; ASTM D1813; 8102Z-TJB-A000 6-1-1
Measurement of Apparent Density (Mass / Unit Area)	DIN EN ISO 2420, DIN EN ISO 12127; ASTM D3776; GMW 3182
Measurement of Tear Strength	DIN EN ISO 3377-1; ISO 13937-2; 810Z-TJB-A000 6.1.4
Apparent Bending Modulus of Plastics and Depression by Means of a Cantilever Beam	DIN EN ISO 17235; 8102Z-TJB-A000, 6.1.8; GMW 14134 (BLC ST300), GMW 3990; DIN 53362
Determination of Volatile Matter	ISO 4684; PR362 BMW
Separation Strength	EN ISO 2411; GMW 3220
Determination of Loose Grain Effect	VDA 230-205

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

**Test(s):**

**Test Method(s):**

Measurement of Thickness

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

Measurement of Apparent Density  
(Mass / Unit Area)

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

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

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

Determination of Loose Grain Effect

VDA 230-205

Separation Strength

EN ISO 2411; GMW 3220

Measurement of tensile Strength and Percentage  
Elongation

GMW 3010; ASTM D5034-06, ASTM D2208;  
DIN EN ISO 3376, DIN EN ISO 13934-1,  
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 17025:2005 *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 2<sup>nd</sup> day of May 2017

A handwritten signature in black ink, written over a horizontal line.

President and CEO  
For the Accreditation Council  
Certificate Number 1700.01  
Valid to December 31, 2018

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