



SCOPE OF ACCREDITATION TO ISO/IEC 17025:2017

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MECHANICAL

Valid To: September 30, 2022

Certificate Number: 0859.04

In recognition of the successful completion of the A2LA evaluation process, accreditation is granted to this laboratory to perform the following weathering and corrosion tests:

Testing to determine material durability using laboratory accelerated methods, visual and instrumental evaluations to measure degradation effects, including gloss and color, mechanical measurements of physical properties before and after exposure.

On the following materials:

Automotive Components, Plastics, Paints, Textiles, Roofing, Sealants, Glass, Photovoltaic, and Solar Heating materials

Using the following test methods:

**Accelerated Weathering Tests**

**Test Method(s)**

|   |                          |
|---|--------------------------|
| Water Resistance of Coatings Using Water for Apparatus                                    | ASTM D1735               |
| Water Resistance to 100% Relative Humidity  | ASTM D2247               |
| Lightfastness and Weatherability of Printed Matter  | ASTM D3424 Methods 3 & 4 |
| Xenon Arc Exposure of Plastics for Indoor Applications                                    | ASTM D4459               |
| Testing Water Resistance of Coatings Using Controlled Condensation                        | ASTM D4585               |
| Fluorescent UV Condensation Exposure of Paint and Related Coatings                        | ASTM D4587               |
| Accelerated Testing Color Stability of Indoor Plastics                                    | ASTM D4674 Methods IV    |
| Cyclic Salt Fog / UV Exposure of Painted Metal  | ASTM D5894               |
| Specification for Polyolefin Based Plastic Lumber Decking Boards                          | ASTM D6662               |
| Xenon Arc Exposure Test with Enhanced Light and Water Exposure for Transportation Coating | ASTM D7869               |

**Accelerated Weathering Tests (continued)****Test Method(s)**

|  |   |
|--|---|
| Exposing Nonmetallic Materials in Accelerated Test Devices That Use Laboratory Light Sources                                 | ASTM G151                                 |
| Operating Fluorescent Light Apparatus for UV Exposure of Nonmetallic Materials   | ASTM G154                                 |
| Operating Xenon Arc Light Apparatus for Exposure of Nonmetallic Materials  | ASTM G155                                 |
| Exposure of Wood Coatings to Artificial Weathering Using Fluorescent UV and Water  | EN 927-6                                  |
| Coil Coated Metals – Resistance to Fluorescent UV and Water Condensation   | EN 13523-10                               |
| Laboratory Accelerated Cyclic Corrosion Test   | Ford CETP 00.00-L-467                     |
| Paints and varnishes – Determination of resistance to neutral salt spray (fog)   | GB/T 1771                                 |
| Paints and varnishes - Artificial weathering and exposure to artificial radiation - Exposure to filtered xenon-arc radiation | GB/T 1865                                 |
| Textiles-Tests for colour fastness-Colour fastness to artificial light: Xenon arc fading lamp test                           | GB/T 8427                                 |
| Corrosion tests in artificial atmospheres-salt spray tests   | GB/T 10125                                |
| Plastics – Methods of Exposure to Laboratory Light Sources:  |   |
| Part 1: General Guidance   | GB/T 16422.1                              |
| Part 2: Xenon-Arc Lamps  | GB/T 16422.2                              |
| Part 3: Fluorescent UV Lamps   | GB/T 16422.3                              |
| Water Fog Humidity Test  | GM 4465P <sup>1</sup> (Superseded 2011)   |
| Laboratory Accelerated Exposure of Automotive Materials (UV)   | GM 9125P<br>(withdrawn 2013) <sup>1</sup> |
| Salt Spray Test  | GMW 3286                                  |
| High Humidity Test   | GMW 14729                                 |
| Cyclic Corrosion Laboratory Test   | GMW 14872                                 |
| Textiles – Tests for Colorfastness to Artificial Light: Xenon Arc  | ISO 105-B02                               |
| Textiles – Tests for Colorfastness to Artificial Light at High Temperatures: Xenon Arc                                       | ISO 105-B06, Conditions 3 & 5             |
| Plastics - Methods of Exposure to Laboratory Light Sources   |   |
| Part 1: General Guidance   | ISO 4892-1                                |
| Part 2: Xenon-Arc Lamps  | ISO 4892-2                                |
| Part 3: Fluorescent UV Lamps   | ISO 4892-3                                |
| Paint and Varnishes – Resistance to Neutral Salt Spray   | ISO 7253                                  |
| Corrosion Tests in Artificial Atmosphere – Salt Spray Tests  | ISO 9227 (NSS Only)                       |
| Xenon Arc Testing for Paints   | ISO 11341 <sup>1</sup> (Withdrawn 2013)   |
| Fluorescent UV Test on Paints  | ISO 11507 <sup>1</sup> (Withdrawn 2013)   |

**Accelerated Weathering Tests (continued)****Test Method(s)**

Prints and Printing Inks – Assessment of Lightfastness Filtered  
Xenon Arc Light

ISO 12040

Paints and Varnishes — Methods of Exposure to Laboratory Light Sources:

Part 1: General Guidance

ISO 16474-1

Part 2: Xenon-Arc Lamps

ISO 16474-2

Part 3: Fluorescent UV Lamps

ISO 16474-3

Non-Metallic Materials Weathering in a Humid Climate

MBN 10505

Non-Metallic Weathering in Dry and Hot Climates

MBN 10506

Accelerated Exposure of Automotive Exterior Materials Using a  
Fluorescent UV and Condensation Apparatus

SAE J2020

Cosmetic Corrosion Lab Test

SAE J2334

Accelerated Exposure of Automotive Interior Trim Components Using a  
Controlled Xenon Arc Apparatus

SAE J2412

Performance Based Standard for Accelerated Exposure of Automotive  
Exterior Materials Using a Controlled Irradiance Xenon Arc Apparatus

SAE J2527

Corrosion Test Body and Attachments

VW PV 1210

Exposure Test of Passenger Compartment Components

VW PV1303

Exposure Test for Determining the Tackiness of Polypropylene Parts

VW PV 1306

Non-Metallic Materials, Weathering in Dry, Hot Climate

VW PV 3929

Non-Metallic Materials, Weathering in Moist, Hot Climate

VW PV 3930

**Evaluation Methods****Test Method(s)**

Test Method for Specular Gloss

ASTM D523

Haze and Transmittance of Transparent Plastics

ASTM D1003 Method B

Evaluation of Painted or Coated Specimens to Corrosive Environments

ASTM D1654

Visual Evaluation of Color Difference of Opaque Materials

ASTM D1729

Test Method for Yellowness Index of Plastics

ASTM D1925<sup>1</sup>  
(Withdrawn 1995)

Calculation of Color Difference from Instrumentally Measured Color  
Coordinates

ASTM D2244

Evaluation of Visual Color Difference with a Gray Scale

ASTM D2616

Evaluating the Degree of Chalking of Exterior Paint Films

ASTM D4214

Calculating Yellowness and Whiteness Indices from Instrumentally  
Measured Color Coordinates

ASTM E313

Spectrometric Data for Object Color Evaluation

ASTM E1164

Reflectance Factor and Color by Spectrophotometry Using Hemispherical  
Geometry

ASTM E1331

**Evaluation Methods (continued)****Test Method(s)**

|  |             |
|--|-------------|
| Transmittance and Color by Spectrophotometry Using Hemispherical Geometry                              | ASTM E1348  |
| Colorimetry: Spectrophotometric Method   | DIN 5033-3  |
| Gloss Assessment of Plane Surfaces of Paint Coatings and Plastics                                      | DIN 67530   |
| Coil Coated Metals – Test Methods  |             |
| Part 2 - Gloss   | EN 13523-2  |
| Part 3 - Colour Difference Instrumental Comparison   | EN 13523-3  |
| Part 22 - Colour Difference – Visual Comparison  | EN 13523-22 |
| Corrosion/Undercutting Scribe Creepback  | GMW 15282   |
| Gray Scale for Assessing Change in Color   | ISO 105-A02 |
| Determination of Specular Gloss of Non-Metallic Paint Films at 20°, 60° and 85°                        | ISO 2813    |
| Paints and varnishes — Visual comparison of colour of paints   | ISO 3668    |
| Evaluation of Color and Pigments   | ISO 4582    |
| Paints and Varnishes Evaluation of Degradation of Coatings:  |             |
| Part 1 - General Introduction and Designation System   | ISO 4628-1  |
| Part 2 - Assessment of Degree of Blistering  | ISO 4628-2  |
| Part 3 - Assessment of Degree of Rusting   | ISO 4628-3  |
| Part 4 - Assessment of Degree of Cracking  | ISO 4628-4  |
| Part 5 - Assessment of Degree of Flaking   | ISO 4628-5  |
| Part 6 - Assessment of Degree of Chalking by Tape Method   | ISO 4628-6  |
| Part 7 - Assessment of Degree of Chalking by Velvet Method   | ISO 4628-7  |
| Part 8 – Assessment of Degree of Delamination and Corrosion Around a Scribe or Other Artificial Defect | ISO 4628-8  |
| Part 10 - Assessment of Degree of Filiform Corrosion   | ISO 4628-10 |
| Paints and Varnishes - Colorimetry   |             |
| Part 1 - Principles  | ISO 7724-1  |
| Part 2 - Color Measurement   | ISO 7724-2  |
| Part 3 - Calculation of Color  | ISO 7724-3  |
| Instrumental Color Difference Measurement for Exterior Finishes, Textiles and Trim                     | SAE J1545   |
| Instrumental Color of Automotive Trim Material   | SAE J1767   |

**Mechanical Methods****Test Method(s)**

|                                 |            |
|---------------------------------|------------|
| Measuring Adhesion by Tape Test | ASTM D3359 |
| Film Hardness by Pencil Test    | ASTM D3363 |

**Mechanical Methods (continued)****Test Method(s)**

Conditioning and Handling of Nonmetallic Materials for Natural and Artificial Weathering Tests

ASTM G147

Coil Coated Metals - Pencil Hardness

EN 13523-4

Tape Adhesion Test for Painted Finishes

GM 9071P<sup>1</sup> (Superseded 2012)

Paints and Varnishes – Cross-Cut Test (Tape Adhesion)

ISO 2409

<sup>1</sup>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.

WITHDRAWN





# Accredited Laboratory

A2LA has accredited

**Q-LAB CHINA**

*Shanghai, People's Republic of China*

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 11<sup>th</sup> day of August 2020.

A blue ink signature of the Vice President, Accreditation Services.

Vice President, Accreditation Services  
For the Accreditation Council  
Certificate Number 0859.04  
Valid to September 30, 2022

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