



SCOPE OF ACCREDITATION TO ISO/IEC 17025:2017

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CHEMICAL

Valid To: January 31, 2028

Certificate Number: 0255.02

In recognition of the successful completion of the A2LA evaluation process, accreditation is granted to this laboratory to perform the following tests on adhesives, plastics, thermoplastics, rubbers and elastomers:

SPECTROSCOPY

| <u>Test Method</u> | <u>Test</u> |
|---------------------------|--|
| ASTM D3677 | Identification by Infrared Spectrophotometry |
| ASTM D5673 | Elements in Water by Inductively Coupled Plasma-Mass Spectrometry |
| ASTM D7558 | Colorimetric/Spectrophotometric Procedure to Quantify Extractable Chemical Dialkyldithiocarbamate, Thiuram and Mercaptobenzothiazole Accelerators in Natural Rubber Latex and Nitrile Gloves |
| ASTM E1252 | General Techniques for Obtaining Infrared Spectra for Qualitative Analysis |

CHROMATOGRAPHY

| <u>Test Method</u> | <u>Test</u> |
|---------------------------|---|
| ASTM D4327 | Standard Test Method for Anions in Water by Suppressed Ion Chromatography |
| ASTM F2466 | Determining Silicone Volatiles in Silicone Rubber for Transportation Applications |
| Ford AV-102-01 | Determination of Percent Silica-Producing Volatiles in Silicone Rubber Adhesives/Sealers Which Cure at Room Temperature |
| GMW 17224 | Test for Volatiles in Silicone Rubber DLA |
| ARDL 3174 | Residual Accelerator Analysis |
| ARDL 3110 | Thin Layer Chromatography (TLC) |
| BS EN 445-5 | Medical gloves for single use – Extractable Chemical Residues |
| ISO 16190:2021 | Test Method to Quantitatively Determine Polycyclic Aromatic Hydrocarbons (Pahs) in Footwear Materials |

DENSITY

| <u>Test Method</u> | <u>Test</u> |
|----------------------------|--|
| ASTM D297 (Section 16.3.1) | Rubber Products – Chemical Analysis |
| ASTM D1817 | Rubber Chemicals – Density |
| ASTM D792 | Density and Specific Gravity of Plastics by Displacement |

GRAVIMETRIC

| <u>Test Method</u> | <u>Test</u> |
|-----------------------------------|--|
| ASTM D297 (Sections 17-29, 41-51) | Rubber Products – Chemical Analysis |
| ASTM D5630 | Standard Test Method for Ash Content in Plastics |

RUBBER AND FOOD CONTACT ASSESSMENT

| <u>Test Method</u> | <u>Test</u> |
|--------------------|--|
| ARDL 3171 | Formula Evaluation and Extractable Testing |
| 21 CFR 177.2600 | Rubber Articles Intended for Repeated Use |

STATE OF CURE

| <u>Test Method</u> | <u>Test</u> |
|--------------------|-------------------|
| ARDL 3135 | Crosslink Density |

MICROSCOPY

| <u>Test Method</u> | <u>Test</u> |
|---------------------------|---|
| ARDL 3809 | Light Optical (LOM): Carbon Black/Inorganic Filler Dispersion |
| ASTM D3576 (Procedure B) | Light Optical (LOM): Cell Size – Cellular Plastics |
| ARDL 3802 | Light Optical (LOM): Cell Size – Cellular Plastics |
| ARDL 3812 | Light Optical (LOM): Failure Analysis |
| ARDL 3816 | Scanning Electron (SEM/EDX) |
| ARDL 3815 | Scanning Electron: Microdispersion of Inorganic Fillers |
| ARDL 3813 | Scanning Electron: Elemental Analysis |
| ASTM D3849-95a Historical | Transmission Electron: Primary Aggregate |
| ARDL 3803 | Transmission Electron: Primary Aggregate |
| ARDL 3805 | Transmission Electron: Polymer Morphology |

POLYMER BARRIER PROPERTIES

| <u>Test Method</u> | <u>Test</u> |
|-----------------------------|--|
| ASTM D1434-82R23 Historical | Determining Gas Permeability Characteristics of Plastic Film and Sheeting |
| ASTM D6978 | Standard Practice for Assessment of Resistance of Medical Gloves to Permeation by Chemotherapy Drugs |
| ASTM F739 | Permeation of Liquids and Gases Through Protective Clothing Materials Under Conditions of Continuous Contact |

POLYMER BARRIER PROPERTIES (continued)

| <u>Test Method</u> | <u>Test</u> |
|--------------------------------|--|
| ASTM F1383 | Permeation of Liquids and Gases Through Protective Clothing Materials Under Conditions of Intermittent Contact |
| ISO 6529 | Protective Clothing – Protection Against Chemicals – Determination of Resistance of Protective Clothing Materials to Permeation by Liquids and Gases |
| DIN EN 16523-1 | Determination of Material Resistance to Permeation by Chemicals – Permeation by Liquid Chemical Under Conditions of Continuous Contact |
| ASTM E96/E96M | Water Vapor Transmission of Materials |
| ASTM F3267 Sections 7-10, 11.1 | Protective Clothing Chemotherapy Resistance |

THERMAL

| <u>Test Method</u> | <u>Test</u> |
|-----------------------------|--|
| ASTM D3418 | Transition Temperatures and Enthalpies of Fusion and Crystallization of Polymers by Differential Scanning Calorimetry (DSC) |
| ASTM D3850 | Rapid Thermal Degradation of Solid Electrical Insulating Materials by Thermogravimetric Method (TGA) |
| ASTM D3895 | Oxidative-Induction Time of Polyolefins by Differential Scanning Calorimetry (DSC) |
| ASTM D4419 | Measurement of Transition Temperatures of Petroleum Waxes by Differential Scanning Calorimetry (DSC) |
| ASTM D4565 (Sections 17-18) | Physical and Environmental Performance Properties of Insulations and Jackets for Telecommunications Wire and Cable (Oxygen Induction Time) |
| ASTM D4591 | Determining Temperatures and Heats of Transitions of Fluoropolymers by Differential Scanning Calorimetry (DSC) |
| ASTM D7426 | Assignment of the DSC Procedure for Determining Tg of a Polymer or an Elastomeric Compound |
| ASTM E793 | Enthalpies of Fusion and Crystallization by Differential Scanning Calorimetry (DSC) |
| ASTM E794 | Melting and Crystallization Temperatures by Thermal Analysis |
| ASTM E1269 | Determining Specific Heat Capacity by Differential Scanning Calorimetry (DSC) |
| ASTM E1356 | Assignment of the Glass Transition Temperatures by Differential Scanning Calorimetry (DSC) |
| ASTM E2160 | Heat of Reaction of Thermally Reactive Materials by Differential Scanning Calorimetry (DSC) |

THERMAL (continued)

| <u>Test Method</u> | <u>Test</u> |
|---------------------------|---|
| ASTM F2625 | Measurement of Enthalpy of Fusion, Percent Crystallinity, and Melting Point of Ultra-High-Molecular Weight Polyethylene by Means of Differential Scanning Calorimetry |
| ISO 11357-2 | Plastics – Differential Scanning Calorimetry (DSC) – Determination of Glass Transition Temperature and Glass Transition Step Height |
| ISO 11357-3 | Plastics – Differential Scanning Calorimetry (DSC) – Determination of Temperature and Enthalpy of Melting and Crystallization |
| ISO 11357-5 | Plastics – Differential Scanning Calorimetry (DSC) – Determination of Characteristic Reaction – Curve Temperatures and Times, Enthalpy of Reaction and Degree of Conversion |
| ASTM D5992 | Standard Guide for Dynamic Testing of Vulcanized Rubber and Rubber-Like Materials Using Vibratory Methods |
| ASTM E1640 | Assignment of the Glass Transition Temperature by Dynamic Mechanical Analysis |
| ISO 6721-4 | Plastics – Determination of Dynamic Mechanical Properties – Tensile Vibration – Non-Resonance Method |
| ASTM E831 | Linear Thermal Expansion of Solid Materials by Thermomechanical Analysis |
| ISO 11359-1 | Plastics – Thermomechanical Analysis (TMA) – General Principles |
| ISO 11359-2 | Plastics – Thermomechanical Analysis (TMA) – Determination of Coefficient of Linear Thermal Expansion and Glass Transition Temperature |
| ASTM D6370 | Rubber – Compositional Analysis by Thermogravimetry (TGA) |
| ASTM E1131 | Compositional Analysis by Thermogravimetry |
| ASTM E2550 | Thermal Stability by Thermogravimetric |
| ISO 9924-1 | Determination of the Composition of Vulcanizes and Uncured Compounds by Thermogravimetric |
| ISO 9924-2 | Rubber and Rubber Products – Determination of the Composition of Vulcanizates and Uncured Compounds by Thermogravimetry – Acrylonitrile-Butadiene and Halobutyl Rubbers |
| ISO 9924-3 | Determination of the Composition of Vulcanizes and Uncured Compounds by Thermogravimetric |

LEACHING FOR HALIDES AND SULFUR

| <u>Test Method</u> | <u>Test</u> |
|---|--|
| MIL-STD 2041E (SH) – Notice 1- Appendix A Section A.6 | Control of Detrimental Materials |
| ASTM D3566 (Sections 9.1-9.15) | Rubber – Determination of Bromine in the Presence of Chlorine by Oxygen Combustion |

CARBON BLACK

| <u>Test Method</u> | <u>Test</u> |
|---------------------------|----------------------------------|
| ASTM D1510 (Method A) | Iodine Adsorption Number |
| ASTM D2414 | Oil Absorption Number (OAN) |
| ASTM D1506 (Method A) | Ash Content |
| ASTM D1618 | Transmittance of Toluene Extract |
| ASTM D1619 (Method A) | Carbon Black – Sulfur Content |
| ASTM D1508 | Pelleted Fines and Attrition |
| ASTM D1509 (Method A) | Carbon Black – Heating Loss |
| ASTM D1514 | Sieve Residue |
| ASTM D1513 | Pour Density Pelleted |
| ASTM D1512 (Method A) | pH Value |

MOISTURE CONTENT BY KARL FISCHER TITRATION

| <u>Test Method</u> | <u>Test</u> |
|---------------------------|--|
| ASTM D6869 | Coulometric and Volumetric Determination of Moisture in Plastics Using the Karl Fischer Reaction (the Reaction of Iodine with Water) |
| ISO 15512 | Plastics – Determination of Water Content |

FLASHPOINT

| <u>Test Method</u> | <u>Test</u> |
|---------------------------|---|
| ASTM D92 | Flash Points and Fire Points by Cleveland Open Cup Tester |

CONTACT ANGLE DETERMINATION & SURFACE TENSION

| <u>Test Method</u> | <u>Test</u> |
|---------------------------|---|
| ASTM D7334 | Surface Wettability of Coatings, Substrates, and Pigments by Advancing Contact Angle Measurement |
| ASTM D7490 | Measurement of the Surface Tension of Solid Coatings, Substrates, and Pigments Using Contact Angle Measurements |

PERSONAL PROTECTIVE EQUIPMENT

| <u>Test Method</u> | <u>Test</u> |
|---|---|
| BS EN ISO 374-1 | Protective Gloves Against Dangerous Chemicals and Micro-Organisms |
| BS EN ISO 21420 Clause 5.1 and 6.1 | Sizing and Measurement of Gloves |
| BS EN ISO 21420 Clause 4.3.2 and ISO 3071 | pH Determination of Gloves |
| BS EN ISO 21420 Clause 5.2 | Dexterity of Gloves |

Note: 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

Note: The laboratory is accredited for the test methods listed above. The accredited test methods are used in determining compliance with the material and/or safety specifications listed below; 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.

ASTM D4626, E682

European Standards: BS EN 71-3

Vanderbilt Latex Handbook (3rd Edition) (for Reference Only)

EPA Method 24 (see Note 1 below)

Note: For Determination of Volatile Matter Content, Water Content, Density and Weight Solids of Surface Coatings, refer to test methods ASTM D1475, D2369 and D4017 in the accredited portion of this scope listed above.



Accredited Laboratory

A2LA has accredited

AKRON RUBBER DEVELOPMENT LABORATORY, INC.

Akron, OH

for technical competence in the field of

Chemical 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 18th day of May 2026.

A blue ink signature of Mr. Trace McInturff, written in a cursive style.

Mr. Trace McInturff, Vice President, Accreditation Services
For the Accreditation Council
Certificate Number 0255.02
Valid to January 31, 2028

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