



CERTIFICATE OF ACCREDITATION

The ANSI National Accreditation Board

Hereby attests that

Vi-Chem, LLC
owned by Americhem, Inc.
55 Cottage Grove Street SW
Grand Rapids, MI 49507
(and the satellite as listed on the scope)

Fulfills the requirements of

ISO/IEC 17025:2017

In the field of

TESTING

This certificate is valid only when accompanied by a current scope of accreditation document.
The current scope of accreditation can be verified at www.anab.org.

R. Douglas Leonard Jr., VP, PILR SBU

Expiry Date: 06 October 2022

Certificate Number: L2148



This laboratory is accredited in accordance with the recognized International Standard ISO/IEC 17025:2017.
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).

SCOPE OF ACCREDITATION TO ISO/IEC 17025:2017

**Vi-Chem, LLC
and owned by Americhem, Inc.**

55 Cottage Grove Street SW
Grand Rapids, MI 49507
Linda Boyett lboyett@americhem.com
616 247 8501

TESTING

Valid to: **October 06, 2022**

Certificate Number: **L2148**

Mechanical

Specific Tests and/or Properties Measured	Specification, Standard, Method, or Test Technique	Items, Materials, or Product Tested	Key Equipment, Technology
Chemical Resistance	GM: GMW14334	Plastics / TPE's	
Cleanability	Chrysler: LP-463KC-04-01	Plastics / TPE's	Crockmeter, AATCC Gray Scale for Staining
Cold Flexibility	Chrysler: LP-463DD-07-01 Ford: FLTM BN 102-01 Method A GM: GMW16746 SAE J323 Test temp: (-40 to 0)°C	Plastics / TPE's	Cold Box / Freezer, Metal Mandrels, Mandrel Fixture, Temperature Probe,
Color Reading	ASTM D2244 SAE J1545	Plastics / TPE's	Spectrophotometer
Compression Set	ASTM D395 Method B ISO 815 – 1,2 Test Temp: (-40 to 250) °C	Plastics / TPE's	Compression Device, Oven, Cold Box / Freezer, Micrometer
Crock and Mar Resistance	Chrysler: LP-463PB-54-01 60° Gloss only	Plastics / TPE's	Crockmeter, Glossmeter
Crocking	Ford: FLTM BN 107-01 SAE J861 ISO 105-X12	Plastics / TPE's	Crockmeter, AATCC Gray Scale for Staining, Light Booth

Mechanical

Specific Tests and/or Properties Measured	Specification, Standard, Method, or Test Technique	Items, Materials, or Product Tested	Key Equipment, Technology
Five Finger Scratch	Ford: FLTM BO 162-01; FLTM BN 108-13 GM: GMW14698	Plastics / TPE's	Five Finger Scratch Apparatus, Spring Balance, Stop Watch, Light Booth, AATCC Gray Scale Rating for Color Change
Flexural Properties	ASTM D790 ISO 178 (0 to 500) N (0 to 5 000) N (2,4,6,8) in	Plastics / TPE's	Tension/Compression Test Machine with Flex Mod Fixture
Fluid Resistance	ASTM D471 ISO 1817	Plastics / TPE's	Glass Test Tubes with stoppers, spacers and hangers, Oven
Fogging	Chrysler: LP-463DB-12-01 GM: GMW3235 SAE J1756 Test Temp: Cool: (21 to 38) °C Hot: (85 to 120) °C (2 to 100) %	Plastics / TPE's	Fog Test Unit, Glossmeter, Balance, Glassware, glass plates, foil
Gloss Evaluation	ASTM D523 ASTM D2457 60° gloss only	Plastics / TPE's	Glossmeter
Hardness (Shore A, C, D)	ASTM D2240 ISO 868 20A to 90A 20C to 90C 10D to 90D	Plastics / TPE's	Durometer
Heat Aging	ASTM D573 ISO 188 (sec 8.1)	Plastics / TPE's	Oven
High Temperature Humidity Aging	GM: GM9329P	Plastics / TPE's	Oven, Specimen tray with wire gauze & clips, Tension/Compression Test Machine

Mechanical

Specific Tests and/or Properties Measured	Specification, Standard, Method, or Test Technique	Items, Materials, or Product Tested	Key Equipment, Technology
Hot/Cold Cycles	Chrysler: LP-463DD-08-02	Plastics / TPE's	Oven Cold Box / Freezer Micrometer, Calipers, Ruler, Balance
Mar Resistance	GM: GMW14130	Plastics / TPE's	Mar Tester, Spring Balance,
Melt Flow Rate	ASTM D1238, Type A ISO 1133-1	Plastics / TPE's	Melt Flow Indexer and Dies
Mold Shrinkage	ISO 2577	Plastics / TPE's	Injection Molder, Compression Molder, Calipers
Moisture Content	ASTM D6980	Plastics / TPE's	Moisture Analyzer
Odor	Ford: FLTM BO 131-03 SAE J1351 GM: GMW3205	Plastics / TPE's	Glass Jars & Odorless Seals, Metal Cans, Stainless Steel Support Frame, Oven, Desiccator
Oven Aging	SAE J2236	Plastics / TPE's	Oven, Tension/Compression Test Machine
Resistance to Scuffing	SAE J365	Plastics / TPE's	Rotary Platform Double Head Abrader, Abrasive Wheels, & Accessory Loads
Soilability	Chrysler: LP-463KC-04-02	Plastics / TPE's	Wear Test Meter, AATCC Gray Scale for Staining
Soilability / Cleanability	Ford: FLTM BN 112-08	Plastics / TPE's	AATCC Gray Scale for Color Change
Soilability / Cleanability	GM: GMW3402	Plastics / TPE's	Crockmeter, Balance, Temperature Probe/ Thermometer, AATCC Gray Scale for Color Change & Gray Scale for Staining
Specific Gravity (Relative Density)	ASTM D792 ISO 1183-1 Method A (0.010 to 25.000) g/cm ³	Plastics / TPE's	Densimeter / Analytical Balance with Immersion Vessel, Temperature Probe/ Thermometer
Staining	Ford: FLTM BN 103-01	Plastics / TPE's	Glass Plates, Oven, Weights
Taber Wear Resistance of Trim Materials	Chrysler: LP-463KB-21-01 ASTM D3884 GMW3208	Plastics / TPE's	Rotary Platform Double Head Abrader, Abrasive Wheels, & Accessory Loads



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Mechanical

Specific Tests and/or Properties Measured	Specification, Standard, Method, or Test Technique	Items, Materials, or Product Tested	Key Equipment, Technology
Tear Strength	ASTM D624 ASTM D1004 ISO 34-1 Method B Test temp: (-40 to 250)°C (0 to 3700) kN/m (0 to 370) kN/m	Plastics / TPE's	Injection Molder, Compression Molder, Cutting Dies, Tension/Compression, Test Machine, Micrometer
Tensile Properties	ASTM D412 Method A ISO 37, Type 1 ISO 527-1,2,3 Type 5 Test temp: (-40 to 250)°C Tensile Strength, Ultimate Elongation and Stress at intermediate elongations (Up to 1450) MPa	Plastics / TPE's	Injection Molder, Compression Molder, Cutting Dies, Tension/Compression, Test Machine, Micrometer
Tensile Properties	ASTM D638 Test temp: (-40 to 250)°C Stress at Yield and Stress at Break only (Up to 1450) MPa	Plastics	Injection Molder, Compression Molder, Cutting Dies, Tension/Compression, Test Machine, Micrometer
Volatile Loss	ASTM D1203 Method A Chrysler: LP-463DD-04-01 Rev C ISO 176 Method A	Plastics / TPE's	Balance, Oven, Metal Containers, Wire Cages, Micrometer, Glassware, Desiccator,
Wear Resistance of Soft Trim Materials	Chrysler: LP463KB-06-01	Plastics / TPE's	Wear Test Meter,
Flammability	ISO 3795 GM: GMW3232 SAE J369	Plastics / TPE's	Flame Chamber Test Cabinet, Ruler, Stop Watch

SCOPE OF ACCREDITATION TO ISO/IEC 17025:2017

Satellite Site

Americhem, Inc.

2000 Americhem Way
Cuyahoga Falls, OH 44221
Linda Boyett lboyett@americhem.com
330 929 4213 ext. 1323

TESTING

Valid to: **October 06, 2022**

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Mechanical

Specific Tests and/or Properties Measured	Specification, Standard, Method, or Test Technique	Items, Materials, or Product Tested	Key Equipment or Technology
Asphalt Staining	Chrysler: LP-463PB-57-02 Ford: WSK-M4D689-A1 (Par 3.6)	Plastics / TPE's	Spectrophotometer
Color Evaluation	ASTM D2244	Plastics / TPE's	Spectrophotometer
Fluids Staining	Chrysler LP-463PB-57-03	Plastics	Spectrophotometer
Gloss Evaluation	ASTM D523	Plastics / TPE's	Glossmeter
Tacky Testing	Ford: FLTM BO-61-01	Plastics / TPE's	Xenon Test Chamber
Xenon Arc-Type Weathering	Ford: FLTM BO 116-01 Honda: HES D 6601, JIS B7754 Nissan: NES M0135, SAE J2412, SAE J2527, Toyota: TSM0501G; ASTM D7869	Plastics / TPE's	Xenon Test Chamber

Chemistry

Specific Tests and/or Properties Measured	Specification, Standard, Method, or Test Technique	Items, Materials, or Product Tested	Key Equipment or Technology
Transition Temperatures	ASTM D3418	Polymers	Differential Scanning Calorimetry (DSC) Unit
Heat Capacity	ASTM E1269	Polymers	Differential Scanning Calorimetry (DSC) Unit
Glass Transition Temperatures	ASTM E1356	Polymers	Differential Scanning Calorimetry (DSC) Unit
Thermal Stability	ASTM E537	Polymer Component Materials	Differential Scanning Calorimetry (DSC) Unit
Internal Reflection Spectroscopy	ASTM E573	Polymers	Infrared Reflection Spectroscopy (IR) unit
Infrared Spectra Qualitative Analysis	ASTM E1252	Polymers	Infrared Reflection Spectroscopy (IR) unit
Infrared Microanalysis	ASTM E334	Polymers	Infrared Reflection Spectroscopy (IR) unit

Note:

1. This scope is formatted as part of a single document including Certificate of Accreditation No. L2148.



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