



SCOPE OF ACCREDITATION TO ISO/IEC 17025:2017

ELEMENT MATERIALS TECHNOLOGY DETROIT - WARREN 11 MILE
27485 George Merrelli Drive
Warren, MI 48092
Stephen Karrer Phone: 586 754 9000 ext. 32900
Email: stephen.karrer@element.com

CHEMICAL

Valid To: December 31, 2022

Certificate Number: 0098.14

In recognition of the successful completion of the A2LA evaluation process, accreditation is granted to this laboratory at the location above as well as the satellite laboratory location listed below to perform the following chemical tests and analysis on petroleum and petroleum products, plastics, rubbers, textiles, labels, gasket materials, metals, oxides, ceramics, paints, and paint products:

Table with 2 columns: Test Method and Test. Rows include Ash (ISO 3451-1 to 5, ASTM D2584, ASTM D5630), Flammability (Chrysler MS JP 9-4, FLTM BN 024-02, FMVSS 571.302, GB 8410, GMW3232, HES C206 / HES D6003, ISO 3795, MES CF 050, NES M0094, SAE J369, Toyota TSM0500G, VW TL1010 / DIN 75200, Volvo VCS 5031,19).

(A2LA Cert. No. 0098.14 (Formerly 0038.08)) 03/04/2021

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<u>Test Method</u>	<u>Test</u>
Thermal Analysis	
Linear Thermal Expansion	
ASTM D696	Coefficient of Linear Thermal Expansion of Plastics Between -30 °C and 30 °C
Thermomechanical Analysis, TMA	
ASTM E831	Linear Thermal Expansion of Solid Materials by TMA
ASTM E1545	Glass Transition Temperature by Thermomechanical Analysis
ISO 11359-1	Thermomechanical Analysis, TMA, General Principles
ISO 11359-2	Glass Transition Temp. and Coefficient of Thermal Expansion by TMA
Water Absorption	
ASTM D570	Water Absorption of Plastic
ISO 62	Plastics-Determination of Water Absorption

³This accreditation covers testing/calibration performed at the main laboratory listed above, and the following satellite laboratory listed below:

1920 Concept Dr.
Warren, MI 48091-1385

<u>Test(s):</u>	<u>Test Method(s):</u>
Composition Analysis by Thermogravimetry (TGA)	ASTM E1131; ISO 11358
Melting & Crystallization Temperature by Thermal Analysis (DSC)	ASTM E794 ASTM D3418 ASTM E1356 GM 9094P (Inactive 2011) ¹ ISO 11357-1 ISO 11357-2 ISO 11357-3 ASTM D3895 ASTM E1269
Formaldehyde by UV	PV3925 VDA 275 FLTM BZ106-01A Bottle Test
pH of Aqueous Solutions with Glass Electrode	ASTM E70; Chrysler LP-463KC-01-01A
Thermal Oxidative Stability of Propylene (Biaxial Rotator)	ASTM D3012; GM9059P (Inactive) ¹ ; GMW14651 (Inactive) ¹ ; ISO 4577

<u>Test(s):</u>	<u>Test Method(s):</u>
Transition Temperatures of Polymers by Thermal Analysis	ASTM D3418
<p>Volatile Organic Compound (VOC)</p> <p>Analysis by GC/MS and HPLC per ISO 16000-3, ISO 16000-6</p> <p>Analysis by GC/MS and HPLC per ASTM D6196, ASTM D5197</p> <p>Analysis by HPLC</p> <p>Analysis by GCMS</p>	<p>PV 3942: Small Chamber PHASE 1-5 D7706: Micro Chamber CAN/ULC-S774-09: Dynamic Chamber Analysis TPJLR.52.104: Micro Chamber MES CF 080: Headspace TSM0508G: BAG NES M0402: BAG 01.12-L-10661: BAG BZ 108-01: BAG MS300-55: BAG DWG No 00942 SNA000: : BAG ISO 12219-2, ISO 12219-3, ISO 12219-4, ISO 12219-6, ISO 12219-9 VCS 1027, 2769 CS-A0229, CS-13398 GS97014-3 TP JLR 352-107 RNES-B-20116 v. 2.0 0094Z-T7S-0000 MS 300-57 PN 780 GMW17914 TMS0512G TS420-00-033</p> <p>ASTM D5116: Small Chamber</p> <p>GMW15635: Thermodesorption (HPLC) FLTM BZ 156-01: Bottle HPLC VCS 1027, 2739 BMW AA-0061</p> <p>FLTM BZ 157-01B: Headspace GCMS GMW8081: Headspace (GCMS) VDA278: Thermodesorption (GCMS) GMW15634: Thermodesorption GCMS VDA 277: Headspace GC/MS VCS 1027, 2749, VCS 1027, 2759 VW PV 3341 EN 13130-4 (1,3-Butadiene) Headspace</p>

¹This 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.



Accredited Laboratory

A2LA has accredited

ELEMENT MATERIALS TECHNOLOGY DETROIT – WARREN 11 MILE

Warren, MI

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 4th day of March 2021.

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

Vice President, Accreditation Services
For the Accreditation Council
Certificate Number 0098.14
Valid to December 31, 2022

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