



SCOPE OF ACCREDITATION TO ISO/IEC 17025:2005

ELEMENT - WARREN¹
27485 George Merrelli Drive
Warren, MI 48092
Mike Trombley Phone: 586 754 9000
Email: michael.trombley@element.com

CHEMICAL

Valid To: December 31, 2012

Certificate Number: 0038.04

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

Spectroscopy

Fourier Transform Infrared Spectroscopy –

ASTM E1252	FTIR, Qualitative Analysis
ASTM D3677	Rubber - Identification by Infrared Spectrophotometry

Thermal Analysis

(DSC, TMA, TGA) –

ASTM D3418	Transition Temperature of Polymers by DSC
ASTM D3895	Oxidative Induction Time of Polyolefins by Thermal Analysis
ASTM D4591	Heats of Transitions of Fluoropolymers by DSC
ASTM E831	Linear Thermal Expansion by Thermomechanical Analysis, TMA
ASTM E1131	Compositional Analysis by Thermogravimetry, TGA
ASTM E1356	Glass Transition Temperature by DSC
GM 9094P	Melting Point by Differential Scanning Calorimeter
ISO 11357-1	Differential Scanning Calorimetry, DSC General Principles
ISO 11357-2	Glass Transition Temperature by DSC
ISO 11357-3	Transition Temperature of Polymers by DSC
ISO 11358	Thermogravimetric Analysis, TGA, General Principles
ISO 11359-1	Thermomechanical Analysis, TMA, General Principles
ISO 11359-2	Glass Transition Temp. and Coefficient of Thermal Expansion by TMA

Thermal Analysis (cont)

(DSC, TMA, TGA) –

ISO 3451-1 (Method A)	Ash Content, General Method
ISO 3451-2 (Method A)	Ash Content, Polyalkylene Tera
ISO 3451-3 (Method A)	Ash Content, Cellulose Acetate
ISO 3451-4 (Method A)	Ash Content, Polymides
ISO 3451-5 (Method A)	Ash Content, PVC

Rheological Properties/Dynamic Mechanical Analysis

ASTM D4065	Dynamic Mechanical Properties of Plastics
ASTM D4440	Rheological Measurements of Polymer Melts Using Dynamic Mechanical Procedures
ASTM D5279	Dynamic Mechanical Properties of Plastics Using Torsion
ISO 6721-1	Dynamic Mechanical Properties General Principles
ISO 6721-7	Dynamic Mechanical Properties Torsional, Non-Resonance
ISO 6721-10	Dynamic Mechanical Properties Viscosity, Non-Resonance

¹ Note: This accreditation covers testing performed at the main laboratory listed and fuels testing at the satellite laboratory located at 25440 Sherwood, Center Line, MI 48015.



World Class Accreditation

The American Association for Laboratory Accreditation

Accredited Laboratory

A2LA has accredited

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Warren, MI

for technical competence in the field of

Chemical Testing

This laboratory is accredited in accordance with the recognized International Standard ISO/IEC 17025:2005 *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 30th day of March 2011.



A handwritten signature in black ink, reading "Peter Abney", written over a horizontal line.

President & CEO
For the Accreditation Council
Certificate Number 38.04
Valid to December 31, 2012
Revised May 7, 2012

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