



SCOPE OF ACCREDITATION TO ISO/IEC 17025:2017

EUROFINS MATERIALS SCIENCE NETHERLANDS B.V.

High Tech Campus 11 and 7
Eindhoven, Netherlands 5656 AE
Shannah Workman Phone: 408 396 9340

CHEMICAL

Valid To: May 31, 2025

Certificate Number: 2797.09

In recognition of the successful completion of the A2LA evaluation process, accreditation is granted to this laboratory to perform analytical testing (including contamination analysis, surface and thin-film analysis, bulk compositional analysis and materials and products reliability testing) on: semiconductors, integrated circuits, communication and storage devices, photovoltaic materials, consumer products, optical components, thin film products, biomedical materials and products, pharmaceutical products, packaging materials, composites, metals, alloys, plastics, polymers, glasses, ceramics, powders and nanomaterials.

Test

Contact Angle Measurement
Corrosion Testing
Gel Permeation Chromatography (GPC)

Highly Accelerated Life Testing (HALT)

X-Ray Photoelectron Spectroscopy (XPS)

Fourier Transform Infrared Spectroscopy (FTIR)

Surface Area Pore Size Analysis
(Gas Absorption-Desorption) (BET)

Time-of-Flight Second Ion Mass Spectrometry (TOF-SIMS)

Scanning Electron Microscopy / Energy Dispersive X- Ray Spectroscopy (SEM-EDS) / Dual Beam

Atomic Force Microscopy (AFM) /
Optical Profilometry (OP) / Stylus Profilometry (SP)

Spectroscopic Ellipsometry (SE)

X-Ray Fluorescence Spectrometry (XRF)

Transmission Electron Microscopy /
Energy Dispersive X-Ray Spectroscopy (TEM-EDS)

(A2LA Cert. No. 2797.09) Revised 10/25/2023

Test Method(s)^{1,2}

SOP 60/ F1; ASTM C813, D5946
ASTM F2129
SOP 37/F5; ASTM D5296

SOP 53/F1; GMW8287

SOP 11/F1; ISO 15472, 24237

SOP 03/F/F1; ASTM E1252, E334;
ISO 10993-12, 10993-18

SOP 25/F1

SOP 09/F1

SOP 06/F1/F14/F17;
ASTM E766, E1508

SOP 02/F6

SOP 44/F1

SOP 14/F1; IEC 62321-3-1

SOP 21/F1

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<u>Test</u>	<u>Test Method(s)^{1,2}</u>
Dynamic Mechanical Analysis (DMA)	SOP 33/F1
Thermo Mechanical Analysis (TMA)	SOP 33/F2
Ion Chromatography (IC)	SOP 24/F1; IEC 62321-3-2
Inductively Coupled Plasma Optical Emission Spectrometry (ICP-OES)	SOP 18/F1; 62321-4, 62321-5, 62321-7-1, 62321-7-2; ISO 10993-12, 10993-18, 14949
Inductively Coupled Plasma Mass Spectrometry (ICP-MS)	SOP 18/F1; ISO 18562-1, 18562-4, 10993-12, 10993-18, IEC 62321-4, 62321-5
Laser Ablation Inductively Coupled Plasma Mass Spectrometry (LA-ICP-MS)	SOP 18/F9
Interstitial Gas Analysis (IGA) (C, S)	SOP 19/F1/F3; ISO 22963, ASTM E1019, E1941-10, E1409-13, E1447-22
Liquid Chromatography Mass Spectrometry (LC-MS)	SOP 41/F1/F5. 10993-12, 10993-18; ISO 18562-1, 18562-3, 18562-4
Matrix-Assisted Laser Desorption/Ionization (MALDI)	SOP 41/F4/F5
Helium Leakage Testing (HLT)	SOP 49/F1
Mechanical Testing (Tensile and Compression Testing)	SOP 54/F1; ISO 527-2, 22088-3; ASTM D543-21
Particle Size Distribution – Laser Diffractometry	SOP 55/F1
Particles in water (PTw)	SOP 50/F1, USP 788, ISO 19227, 14708-1,-2,-3-4,-5,-6, -7
Airborne Particle Testing (APT)	SOP 48/F1; ISO 14644:2015 part 1 to 13 ISO 14644:1999 part 1 to 13, 18562-1, 18562-2
Raman Spectroscopy (Raman)	SOP 13/F1
Climate testing (Reliability)	SOP 52/ F1; IEC 60068-2-1, 60068-2-2, 60068-2-14; 60068-2-30, 60068-2-78, 60068-2-66

<u>Test</u>	<u>Test Method(s)</u> ^{1,2}
IK testing (Reliability)	SOP 52/ F2; IEC 60068-2-75; 62262; EN 50102
IP testing (Reliability)	SOP 52/ F3; IEC 60529
Salt Mist testing (Reliability)	SOP 52/ F4; IEC 60068-2-52; ISO 9227;
Solar/ UV testing (Reliability)	SOP52/ F5; IEC 60068-2-5
Drop testing (Reliability)	SOP52/ F6; IEC 60068-2-27
Residual Gas Analysis (RGA)	SOP 40/F4
Thermogravimetric Analysis (TGA)	SOP 22/F5
Differential Scanning Calorimetry (DSC)	SOP 22/F5
Total Organic Contamination (TOC)	SOP 46/F1
Total Organic Contamination in water (TOCw)	SOP 47/F1
UV-Visible Spectroscopy (UV-Vis) / UV-Visible-Near Infrared Spectroscopy (UV-Vis-NIR)	SOP 29/F2
X-Ray Diffraction Spectrometry (XRD)	SOP 16/F1
Gas Chromatography Mass Spectrometry (GC-MS)	SOP 12/F1; ISO 18562-1, 18562-3, 18562-4, 10993-12, 10993-18

¹Failure analyses performed using test methods listed.

²SOPs are accredited internal methods.



Accredited Laboratory

A2LA has accredited

EUROFINS MATERIALS SCIENCE NETHERLANDS B.V.
Eindhoven, Netherlands

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 10th day of July 2023.

A handwritten signature in blue ink, appearing to read "Trace McInturff".

Mr. Trace McInturff, Vice President, Accreditation Services
For the Accreditation Council
Certificate Number 2797.09
Valid to May 31, 2025
Revised October 25, 2023

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