



SCOPE OF ACCREDITATION TO ISO/IEC 17025:2017

EUROFINS MATERIALS SCIENCE NETHERLANDS B.V.
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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.

<u>Test</u>	<u>Test Method(s)^{1,2}</u>
Contact Angle Measurement	SOP 60/ F1; ASTM C813, D5946
Corrosion Testing	ASTM F2129, F3044
Gel Permeation Chromatography (GPC)	SOP 37/F5; ASTM D5296
Highly Accelerated Life Testing (HALT)	SOP 53/F1; GMW8287
X-Ray Photoelectron Spectroscopy (XPS)	SOP 11/F1; ISO 15472, 24237
Fourier Transform Infrared Spectroscopy (FTIR)	SOP 03/F/F1; ASTM E1252, E334; ISO 10993-12, 10993-18
Surface Area Pore Size Analysis (Gas Adsorption-Desorption) (BET)	SOP 25/F1
Time-of-Flight Second Ion Mass Spectrometry (TOF-SIMS)	SOP 09/F1
Scanning Electron Microscopy / Energy Dispersive X- Ray Spectroscopy (SEM-EDS) / Dual Beam	SOP 06/F1/F14/F17; ASTM E766, E1508; ISO 11979-5
Atomic Force Microscopy (AFM) / Optical Profilometry (OP) / Stylus Profilometry (SP)	SOP 02/F6
Spectroscopic Ellipsometry (SE)	SOP 44/F1
X-Ray Fluorescence Spectrometry (XRF)	SOP 14/F1/F6/F7/F8/F9; IEC 62321-3-1
Transmission Electron Microscopy / Energy Dispersive X-Ray Spectroscopy (TEM-EDS)	SOP 21/F1

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<u>Test</u>	<u>Test Method(s)</u>^{1,2}
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/F12; IEC 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/F12; ISO 18562-1, 18562-4, 10993-12, 10993-18, 11979-5, 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; ISO 10993-12, 10993-18; ISO 18562-1, 18562-3, 18562-4, 11979-5
High Performance Liquid Chromatography (HPLC)	SOP 26/F
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 Diffraction	SOP 55/F1
Particles in water (PTw)	SOP 50/F1, USP 788, ISO 19227, 14708-1,-2,-3-4,-5,-6, -7



<u>Test</u>	<u>Test Method(s)^{1,2}</u>
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
IK testing (Reliability)	SOP 52/ F2; IEC 60068-2-75; EN 62262
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; ISO 11979-5
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, 11979-5

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 blue ink signature of Mr. Trace McInturff, written over a horizontal line.

Mr. Trace McInturff, Vice President, Accreditation Services
For the Accreditation Council
Certificate Number 2797.09
Valid to May 31, 2025
Revised May 7, 2024