



SCOPE OF ACCREDITATION TO ISO/IEC 17025:2017

CHEMITOX, INC.,
YAMANASHI TESTING CENTER KAI
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ELECTRICAL

Valid To: July 31, 2026

Certificate Number: 1136.04

In recognition of the successful completion of the A2LA evaluation process, accreditation is granted to the main laboratory listed above, and the satellite laboratory listed below, to perform the following electrical tests:

<u>Tests:</u>	<u>Test Method(s)¹:</u>
Dielectric Breakdown Voltage and Dielectric Strength Test	UL 746A (Section 21); CAN/CSA C22.2 No.0.17 (Section 6.2); ASTM D149, ASTM D3755; IEC 60243-1, -2; JIS K6911, JIS C 2110-1, -2, -3; IPC-TM-650 (2.5.6)
Comparative Tracking Index Test	UL 746A (Section 24); CAN/CSA C22.2 No.0.17 (Section 6.5); ASTM D3638; IEC 60112; JIS C2134, C61730-1
High Voltage, Low Current, Dry Arc Resistance Test	UL 746A (Section 23); ASTM D495; JIS K6911; CAN/CSA C22.2 No.0.17 (Section 6.4); IPC-TM-650 (2.5.1)
Hot Wire Ignition Test	UL 746A (Section 32); ASTM D3874; CAN/CSA C22.2 No.0.17 (Section 4.3.1)
Glow Wire Ignition Test	IEC 60695-2-13, IEC 60695-2-10; JIS C60695-2-13, JIS C60695-2-10; UL 746A (Section 35); CAN/CSA C22.2 No. 17 (Section 4.3.5); GB/T 5169.10

Tests:	Test Method(s)¹:
Glow Wire Flame Test	IEC 60695-2-12, IEC 60695-2-10; JIS C60695-2-12, JIS C60695-2-10; GB 5169.10
Glow Wire Flammability Test for End-Product Test	UL 746C (Sections 12.3 and 73); IEC 60695-2-10, IEC 60695-2-11; JIS C60695-2-11, JIS C60695-2-10; GB 5169.10, GB 5169.11; CAN/CSA C22.2 No. 17 (Section 9.3); BS EN 60695-2-11
Volume/Surface Resistivity	UL 746A (Section 22); ASTM D257; JIS C5016, JIS K6911, JIS C6481, JIS C6471, JIS C2139-3-1, JIS C2139-3-2; IEC 62631-3-1, IEC 62631-3-2; CAN/CSA C22.2 No. 17 (Section 6.3)
Heater Safety Test	UL 499 (Sections 33, 36, 37, 38, and 42)
Photovoltaic Modules Testing	
Maximum Power Determination	IEC 61215-2 (Section 4.2, MQT 02); JIS C61215-2 (Section 4.2, MQT 02)
Measurement of Temperature Coefficient	IEC 61215-2 (Section 4.4, MQT 04); JIS C61215-2 (Section 4.4, MQT 04)
Performance at STC	IEC 61215-2 (Section 4.6, MQT 06); JIS C 61215-2(Section 4.6, MQT 06)
Performance at Low Irradiance	IEC 61215-2 (Section 4.7, MQT 07); JIS C61215-2 (Section 4.7, MQT 07)
Photovoltaic (PV) Module Performance Testing and Energy Rating	IEC 61853-1, IEC 61853-2 (Section 7.2)
Ground Continuity	IEC 61730-2 (MST 13); JIS C61730-2(MST 13)
Dielectric Withstand Test	IEC 61730-2 (MST 16); JIS C61730-2 (MST 16)
Insulation Test	IEC 61215-2 (Section 4.3, MQT 03); JIS C61215-2(Section 4.3, MQT 03)

Tests:	Test Method(s)¹:
Photovoltaic Modules Testing (continued)	
Wet Leakage Current Test	IEC 61730-2 (MST 17), IEC 61215-2 (Section 4.15, MQT 15); JIS C61730-2 (MST 17), JIS C61215-2 (Section 4.15, MQT 15);
Reverse Current Overload	IEC 61730-2 (MST 26); JIS C61730-2 (MST 26)
Inclined Plane Tracking Test	IEC 60587; ASTM D2303; UL 746A (Section 26)
Detection of Potential-induced Degradation	IEC TS 62804-1; IEC 61215 (MQT 21)

SATELLITE LOCATION

CHEMITOX, INC.,
HOKUTO LiB TESTING CENTER
2966-8 Yanagisawa, Mukawa-cho
Hokuto-shi, Yamanashi-Ken, Japan 408-0307
Mr. Takuya Hayashida Phone: 81 551 45 6133

ELECTRICAL

Tests:	Test Method(s)¹:
Battery Testing	
Charge / Discharge; Low temperature discharge performance	IEC 62620; JIS C8715-1
High-rate discharge performance	IEC 62620; JIS C8715-1
Capacity retention rate and capacity recovery rate	IEC 62620; JIS C8715-1
AC internal resistance	IEC 62620; JIS C8715-1
DC internal resistance	IEC 62620; JIS C8715-1
Charge / discharge cycle durability	IEC 62620; JIS C8715-1
Standby state retention durability	IEC 62620; JIS C8715-1
Continuous charging test	IEC 62133-2; JIS C62133-2
External short circuit test	IEC 62133-2, IEC 62619; JIS C62133-2, JIS C8715-2; JIS C8714; UN38.3; IEC 62660-2, IEC 62660-3
Overcharge test	IEC 62133-2, IEC 62619; JIS C62133-2, JIS C8715-2, JIS C8714; UN38.3; IEC 62660-3

Tests:	Test Method(s)¹:
Battery Testing (continued)	
Over-discharge test	IEC 62133-2, IEC 62619; JIS C62133-2, JIS C8715-2; UN38.3; IEC 62660-2
Heating test	IEC 62133-2; IEC 62619; JIS C62133-2, JIS C8715-2; IEC 62660-2
Crush test	IEC 62133-2; JIS C62133-2, JIS C8714; IEC 62660-3; UN38.3
Thermal cycle test	IEC 62133-2; JIS C62133-2; UN38.3; IEC 62660-3; SAE J2464; ISO 16750-4
Nail stab test	SAND 2005-3123, SAE J2464

¹ On the following materials and products: Adhesives and Sealants; Ceramics; Films and Packaging; Leather; Packaging and Containers; Paper, Paperboard and Pulp; Plastics and Polymers; Rubber and Rubber Products; Textiles; Information Technology Equipment (ITE); Photovoltaic Modules; Printed Wiring Board; Magnet Wire; Varnish; Industrial Laminate; Wire Positioning Devices.



Accredited Laboratory

A2LA has accredited

CHEMITOX, INC., YAMANASHI TESTING CENTER KAI

Yamanashi-ken, Japan

for technical competence in the field of

Electrical 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 26th day of August 2024.

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 1136.04
Valid to July 31, 2026
Revised February 10, 2026

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