CERTIFICATE OF ACCREDITATION

The ANSI National Accreditation Board

Hereby attests that

Sigma-Aldrich RTC, Inc.
2931 Soldier Springs Road
Laramie, WY 82070

Fulfills the requirements of

ISO 17034:2016

In the field of

REFERENCE MATERIAL PRODUCER

This certificate is valid only when accompanied by a current scope of accreditation document.
The current scope of accreditation can be verified at www.anab.org.

R. Douglas Leonard Jr., VP, PILR SBU

Expiry Date: 26 July 2024
Certificate Number: AR-1470

This reference material producer is accredited in accordance with the recognized International Standard ISO 17034:2016. This accreditation demonstrates technical competence for a defined scope and the operation of a reference material producer quality management system.

SCOPE OF ACCREDITATION TO ISO 17034:2016

Sigma Aldrich RTC, Inc.
2931 Soldier Springs Road
Laramie, WY 82070
Scott Stetler Phone: 307-742-5452
shawn.stetler@milliporesigma.com

REFERENCE MATERIAL PRODUCER

Valid to: **July 26, 2024** Certificate Number: **AR-1470**

Chemical

Type of Reference Material	Description of the Reference Material Matrix or Artifact including the Property-Properties Characterized	Method or Techniques Used by the RMP Laboratory to Determine the Assigned Value (if Appropriate)
Reference Materials and Certified Reference Materials	Neat Materials • Pharmaceutical APIs • Pharmaceutical Impurities • Pharmaceutical Excipients • Inorganic Salts • Solvents • Vitamins and Nutraceuticals • Dyes • Fatty Acids/Esters, Triacyglycerides and Oils • Sugars and Sweeteners • Antibiotics • Nucleotides/Nucleosides • Amino Acids • Disinfectants • Melting Range/Melting Point Standards • PAHs • Alkanes/Alkenes/Alkynes • Polypeptides	• Boiling Point • HPLC-MS/MS • HPLC-MS • HPLC • LC-MS Q-TOF • GC-MS/MS • GC • UV-Vis • Polarimetry • Karl Fisher Titration • Titration • Loss on Drying • Residue • TLC • FTIR • Melting Range/Point • TOC • Refractive Index • ICP-OES • ICP-MS • GC-MS • Gravimetry • Raman Spectrometer • NMR, qNMR

Chemical

Type of Reference Material	Description of the Reference Material Matrix or Artifact including the Property-Properties Characterized	Method or Techniques Used by the RMP Laboratory to Determine the Assigned Value (if Appropriate)
Reference Materials and Certified Reference Materials	Biological Clinical Antibiotics	Digi Counter Plate Reader
Reference Materials and Certified Reference Materials	Single and Multi-Component Organic & Inorganic Material in Water and Solvent: • Anions • Minerals • Nutrients • Demands • pH • Oil & Grease • Turbidity • Residues • Cyanide (in various forms) • Phenolics • Settleable Solids • Acidity • Surfactants • Color • Silica • Sulfide • Metals • Chlorine (in various forms) • Chlordane (Total) • SVOCs • VOCs • Herbicides • TOX • Toxaphene • PCBs • Explosives • Pesticides • PAHs • Dissolved Oxygen	• HPLC-MS/MS • HPLC-MS • HPLC • GC-MS/MS • GC • UV-Vis • Karl Fisher Titration • Titration • Loss on Drying • Residue • FTIR • TOC • ICP-OES • ICP-MS • Ion Chromatography (IC) • pH • Conductivity • GC-MS • Gravimetry • Turbidimetry

Chemical

Type of Reference Material	Description of the Reference Material Matrix or Artifact including the Property-Properties Characterized	Method or Techniques Used by the RMP Laboratory to Determine the Assigned Value (if Appropriate)
Reference Materials and Certified Reference Materials	Single and Multi-Component Organic & Inorganic Material in Water and Solvent: • Iodide • Oxidation Reduction • Perchlorate • Salinity • Sulfur • Tannin and Lignin • Thiocyanate • Carbamates • Dioxins/Furans • Formaldehyde • Oxygenates • PBDEs & PCDEs • Pyrethroids • Thiabendazole • Imazalil • Disinfection Byproducts • UV254 • EDB/DBCP • Diquat • Endothal • Glyphosate • Paraquat • THMs • Hydrocarbons • Corrosivity • Langelier Index Units • Sulfite-SO3	• HPLC • HPLC-MS • GC • UV-Vis • Karl Fisher Titration • Titration • Loss on Drying • Residue • FTIR • TOC • ICP-OES • ICP-MS • Ion Chromatography (IC) • pH • Conductivity • GC-MS • Gravimetry • Turbidimetry

Chemical

Type of Reference Material	Description of the Reference Material Matrix or Artifact including the Property-Properties Characterized	Method or Techniques Used by the RMP Laboratory to Determine the Assigned Value (if Appropriate)
Reference Materials and Certified Reference Materials	Single and Multi-Component Organic & Inorganic Material in Oil: • Metals • PCBs	• GC • ICP-MS • ICP-OES
Reference Materials and Certified Reference Materials	Single and Multi-Component Organic & Inorganic Material in Solids: • Anions • Minerals • Nutrients • Demands • pH • Oil & Grease • Residues • Phenolics • Silica • Metals • Chlordane (Total) • SVOCs • VOCs • Herbicides • TOX • Toxaphene • PCBs • Explosives • Pesticides • PAHs • Perchlorate • Sulfur	• HPLC • HPLC-MS • GC • UV-Vis • Karl Fisher Titration • Titration • Loss on Drying • Residue • FTIR • TOC • ICP-OES • ICP-MS • Ion Chromatography (IC) • pH • Conductivity • GC-MS • Gravimetry •

Chemical

Type of Reference Material	Description of the Reference Material Matrix or Artifact including the Property-Properties Characterized	Method or Techniques Used by the RMP Laboratory to Determine the Assigned Value (if Appropriate)
Reference Materials and Certified Reference Materials	Single and Multi-Component Organic & Inorganic Material in Solids: • Carbamates • Dioxins/Furans • Oxygenates • PBDEs & PCDEs • Pyrethroids • Thiabendazole • Imazalil • EDB/DBCP • Diquat • Endothal • Glyphosate • Paraquat • THMs	• HPLC • HPLC-MS • GC • UV-Vis • Karl Fisher Titration • Titration • Loss on Drying • Residue • FTIR • TOC • ICP-OES • ICP-MS • Ion Chromatography (IC) • pH • Conductivity • GC-MS • Gravimetry

Notes:

1. Please contact the RMP organization for more information on CRM uncertainty values, Ucrm values, and other specific lot values. Some of this information may also be available on the RMP's website.
2. This scope is formatted as part of a single document including Certificate of Accreditation No. AR-1470.

R. Douglas Leonard Jr., VP, PILR SBU