



PERRY JOHNSON LABORATORY ACCREDITATION, INC.

Certificate of Accreditation

Perry Johnson Laboratory Accreditation, Inc. has assessed the Organization:

Chem Service, Inc.

660 Tower Lane, West Chester, PA 19381

*and hereby declares that the Organization is accredited in accordance with
the recognized International Standard:*

ISO 17034:2016 & the relevant requirements of ISO/IEC 17025:2017

This accreditation demonstrates technical competence for a defined scope and the operation of a reference material producer quality management system (as outlined by the joint ISO-ILAC-IAF Communiqué dated April 2017):

Neat Organic Compounds, Single Component and Multi-Component Homogeneous Organic Solutions in Organic or Aqueous Solvents (As detailed in the supplement)

Accreditation claims for such reference material production shall only be made from addresses referenced within this certificate. This Accreditation is granted subject to the system rules governing the Accreditation referred to above, and the Organization hereby covenants with the Accreditation Body's duty to observe and comply with the said rules.

For PJLA:

Tracy Szerszen
President

Initial Accreditation Date:

August 31, 2012

Issue Date:

June 09, 2020

Expiration Date:

June 30, 2022

Revision Date:

April 1, 2021

Accreditation No:

63520

Certificate No:

L20-346-R1

Perry Johnson Laboratory
Accreditation, Inc. (PJLA)
755 W. Big Beaver, Suite 1325
Troy, Michigan 48084

The validity of this certificate is maintained through ongoing assessments based on a continuous accreditation cycle. The validity of this certificate should be confirmed through the PJLA website: www.pjlab.com



Certificate of Accreditation: Supplement

Chem Service, Inc.

660 Tower Lane, West Chester, PA 19381-0599
 Contact Name: Mary Beth O'Donnell Phone: 610-692-3026

Accreditation is granted to the Organization for the production of certified reference material and reference material as follows:

REFERENCE MATERIAL CATEGORIES	ITEMS, MATRIX MATERIALS OR PRODUCTS	SPECIFIC CONSTITUENTS OR PROPERTIES	SPECIFICATION, STANDARD METHOD OR TECHNIQUE USED	RANGE (IF APPLICABLE)	REFERENCE VALUE CAPABILITY	CRM OR RM
Chemical Composition A.3 Organic Reference Materials ^F	Single Component and Multi-component Homogeneous Organic Solutions in Organic or Aqueous Solvents	Analyte Identification and Concentration	Gravimetric with Verification by: <ul style="list-style-type: none"> •GC/ECD •GC/FID •GC/MSD •GC/TCD •HPLC •LC/MS/MS 	1 µg/mL to 100 000 µg/mL	± 2 % relative	RM/CRM
Reference Materials and Certified Reference Materials ^F	Neat Materials	Analyte Identification and Purity	<ul style="list-style-type: none"> •GC/FID •GC/TCD •GC/ECD •GC/MSD •LC/MS/MS •HPLC •FT-IR •Karl Fisher •Titration •Melting Point • Differential Scanning Calorimetry (DSC) • Thermogravimetric Analysis (TGA) 	1 % to 100 %	± 0.5 % relative	RM/CRM

- Per APLAC TC008 sections 6.5 & 6.6 "For CRMs, the scope of accreditation shall be expressed in terms of a best Reference Value Capability which shall include the RMP's estimate of its least uncertainty of measurement (U_{CRM}) for each property value's range it reports. ... CRMs that are an identification value (such as species identification) or where the property value is an ordinal number (such as a color fastness chart) do not require an uncertainty of measurement to be stated in the scope of accreditation." Per section 6.3 "An accredited RMP is not permitted to report on a RM certificate an uncertainty of property value which is less than or better than that stated in its scope of accreditation." Per section 6.12 "The uncertainty covered by the Reference Value Capability shall be expressed as the expanded uncertainty having a specific coverage probability (often 95 %). The unit of the uncertainty shall always be the same as that of the property value or in a term relative to the property value, for example a percentage or ratio of the property value." See sections 6.7 through 6.11 for additional information.
- The presence of a superscript F means that the laboratory performs testing of the indicated parameter at its fixed location. Example: Outside Micrometer^F would mean that the laboratory performs this testing at its fixed location.