CERTIFICATE OF ACCREDITATION

This is to attest

CALPROX QUALITY AND STANDARDIZATION SOLUTIONS

INDUSTRIAL CITY, M41
ABU DHABI, 28149, UNITED ARAB EMIRATES

Calibration Laboratory CL-230

has met the requirements of AC204, *IAS Accreditation Criteria for Calibration Laboratories*, and has demonstrated compliance with ISO/IEC Standard 17025:2017, *General requirements for the competence of testing and calibration laboratories*. This organization is accredited to provide the services specified in the scope of accreditation.

Expiration Date February 1, 2026
Effective Date June 11, 2025

International Accreditation Service
Issued under the authority of IAS management

Visit www.iasonline.org for current accreditation information.

SCOPE OF ACCREDITATION

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CALPROX QUALITY AND STANDARDIZATION SOLUTIONS

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Accredited to ISO/IEC 17025:2017 *Effective Date June 8, 0015*

CALIBRATION AND MEASUREMENT CAPABILITY (CMC)*

MEASURED QUANTITY or DEVICE TYPE CALIBRATED	RANGE	UNCERTAINTY[1,2] (±)	CALIBRATION METHOD OR PROCEDURE, STANDARD EQUIPMENT (OPTIONAL)
Chemical/Gas			
Ultraviolet Spectrometer	241.1 nm 249.9 nm 278.1 nm 287.2 nm 333.5 nm 345.4 nm 361.3 nm 385.6 nm 416.3 nm 451.4 nm 467.8 nm 485.2 nm 536.6 nm 640.5 nm	0.26 nm 0.79 nm 0.28 nm 0.45 nm 0.12 nm 0.77 nm 0.51 nm 0.25 nm 0.51 nm 0.91 nm 0.65 nm 0.47 nm 0.16 nm 0.11 nm	**Direct Method by using CRM:** Holmium Oxide Potassium dichromate Toluene in Hexane Potassium Chloride
Fourier-Transform Infrared Spectrometer	3060.0 cm^{-1} 2849.5 cm^{-1} 1942.9 cm^{-1} 1601.2 cm^{-1} 1583.0 cm^{-1} 1154.5 cm^{-1} 1028.3 cm^{-1}	1.8 cm^{-1} 1.4 cm^{-1} 1.3 cm^{-1} 0.57 cm^{-1} 2.7 cm^{-1} 2.2 cm^{-1} 0.58 cm^{-1}	**Direct Method by using CRM:** Polystyrene film
Atomic Absorption Spectrometer	Flame mode: 0 ppm to 2 ppm Furnace mode: 0 ppb to 1 ppb	 0.67 parts in 10^6 0.044 parts in 10^9	**Direct Method by using CRM:** Copper Manganese
Inductively Coupled Plasma-Optical Emission Spectrometer	250 ppb to 5000 ppb Phosphorous Lead	 3.2 parts in 10^9 2.2 parts in 10^9	**Direct Method by using CRM:** Lead

** If information in this CMC is presented in non-SI units, the conversion factors stated in NIST Special Publication 811 "Guide for the Use of the International System of Units (SI)" apply.*

MEASURED QUANTITY or DEVICE TYPE CALIBRATED	RANGE	UNCERTAINTY[1,2] (±)	CALIBRATION METHOD OR PROCEDURE, STANDARD EQUIPMENT (OPTIONAL)
			Phosphorous
High Performance Liquid Chromatograph	10 ppm to 20 ppm UV detector PDA detector Refractive index detector with Linearity Fluorescence detector	 0.13 parts in 10^6 0.51 parts in 10^6 1.1 parts in 10^6 1.1 % 0.68 parts in 10^6	**Direct Method by using CRM:** Caffeine Anthracene **Equipment:** Thermometer Stopwatch
Liquid Chromatography Triple Quadruple Mass Spectrometer	1 ppb to 100 ppb ESI APCI	 2.2 parts in 10^9 5.7 parts in 10^9	**Direct Method by using CRM:** Reserpine
Gas Chromatograph	800 ppm to 4000 ppm	5.8 parts in 10^6	**Direct Method by using CRM:** Isopropyl Alcohol Tetrahydrofuran **Equipment:** Thermometer Gas Flow meter
Gas Chromatography Mass Spectrometer	1 ppb to 250 ppb	2.4 parts in 10^9	**Direct Method by using CRM:** Octafluronapthalene **Equipment:** Thermometer Gas flowmeter
Gas Chromatography Triple Quadruple Mass Spectrometer	1 ppb to 250 ppb	2.8 parts in 10^9	**Direct Method by using CRM:** Octafluronapthalene **Equipment:** Thermometer Gas flowmeter
Dynamic Imaging Particle Analyzer	Diameter: 10 µm to 70µm Particle Concentration: 0 particles/mL to 3000 particles/mL	 2.7 µm 3.4 particles/mL	**Direct Method by using CRM:** CC10,20CC and 50CC Duke-4250A, 4225A, 4220A, 4210A and 425A 4K-15
Automated Sample Preparation System	0 µL to 2000 µL	1.5 µL	**Direct Method by Equipment:** Analytical Balance
Optical Emission Spectrometer C Si Mn P	 0.005 % to 4.5 % 0.005 % to 5.0 % 0.001 % to 1 % 0.0005 % to 1.5 %	 0.008 % 0.010 % 0.007 % 0.001 %	**Direct Method by using CRM:** LOW Alloy steel CRM, Zinc Alloy CRM

MEASURED QUANTITY or DEVICE TYPE CALIBRATED	RANGE	UNCERTAINTY[1,2] (±)	CALIBRATION METHOD OR PROCEDURE, STANDARD EQUIPMENT (OPTIONAL)
Optical Emission Spectrometer (cont'd.) S Mo Co Nb Ti As N Sn V Ni Cr Cu Al W Sb B	 0.0005 % to 0.5 % 0.001 % to 3.0 % 0.005 % to 20.0 % 0.001 % to 2.0 % 0.001 % to 1.0 % 0.005 % to 1 % 0.0005 % to 0.1 % 0.0007 % to 0.5 % 0.001 % to 3.0 % 0.001 % to 30.0 % 0.001 % to 1.0 % 0.001 % to 1.0 % 0.001 % to 1.0 % 0.003 % to 20.0 % 0.005 % to 20.0 % 0.0001 % to 0.5 %	 0.001 % 0.002 % 0.0034 % 0.0001 % 0.0004 % 0.0004 % 0.0008 % 0.0004 % 0.0004 % 0.0028 % 0.005 % 0.007 % 0.005 % 0.0005 % 0.0042 % 0.0001 %	**Direct Method by using CRM:** LOW Alloy steel CRM, Zinc Alloy CRM
Dissolution Apparatus	Temperature 37.0 °C Speed 50 rpm to 100 rpm Depth Shaft Verticality Centering Level Wobbling	1.2 °C	**Direct Method by using CRM:** Prednisone Tablet, Prednisone USP **Equipment:** Level gauge, thermometer, tachometer, protractor and dial gauge.
Radio activity	Reference value as per the CRM certificate used for the calibration: Peak energy Peak efficiency Background Activity	 2 KeV 5 % 5 % 5 %	**Direct Method by using CRM**
Evaporator	Temperature 40 °C Time	5 %	By comparison method using temp sensor & indicator

[1]The uncertainty covered by the Calibration and Measurement Capability (CMC) is expressed as the expanded uncertainty having a coverage probability of approximately 95 %. It is the smallest measurement uncertainty that a laboratory can achieve within its scope of accreditation when performing calibrations of a best existing device. The measurement uncertainty reported on a calibration certificate may be greater than that provided in the CMC due to the behavior of the calibration item and other factors that may contribute to the uncertainty of a specific calibration.

[2]When uncertainty is stated in relative terms (such as percent, a multiplier expressed as a decimal fraction or in scientific notation), it is in relation to instrument reading or instrument output, as appropriate, unless otherwise indicated.

SOP = standard operating procedure
CRM = certified reference material
ppm = parts per million

ppb = parts per billion
ESI = electrospray ionization
APCI = atmospheric pressure chemical ionization