

# **Certificate of Analysis**

# **QCO-100 OP Pesticides**

Catalog Number:	QCO-100	Expiration Date:	01/31/2025
Lot Number:	N0122	Hazard:	Irritant, Flammable
Manufactured Date:	11/08/2021	Solvent:	Acetone

Analyte	Study <u>Mean</u> ug/L	Certified <u>Concentration</u> ug/L	Acceptance <u>Limits</u> ug/L
Azinphos-methyl (Guthion)	7.85	8.53 +/- 0.0794	0.853-15.0
Bolstar	0.00	0.00 +/- 0.00	0.00-0.00
Chlorpyrifos	0.00	0.00 +/- 0.00	0.00-0.00
Demeton-o	0.00	0.00 +/- 0.00	0.00-0.00
Demeton-s	0.00	0.00 +/- 0.00	0.00-0.00
Diazinon	3.56	4.17 +/- 0.0388	1.59-6.39
Dichlofenthion	0.00	0.00 +/- 0.00	0.00-0.00
Dichlorvos	0.00	0.00 +/- 0.00	0.00-0.00
Disulfoton	5.21	6.56 +/- 0.0611	1.08-10.7
Ethion	0.00	0.00 +/- 0.00	0.00-0.00
Ethoprop	0.00	0.00 +/- 0.00	0.00-0.00
Malathion	8.30	10.9 +/- 0.101	2.37-17.3
Parathion, ethyl	3.88	4.61 +/- 0.0429	2.54-6.68
Stirophos	0.00	0.00 +/- 0.00	0.00-0.00
Tokuthion	0.00	0.00 +/- 0.00	0.00-0.00
Trichloronate	0.00	0.00 +/- 0.00	0.00-0.00

This CRM was manufactured by NSI Lab Solutions following quality procedures meeting the requirements of ISO 9001, ISO 17025, and ISO 17034. Acceptance limits are set at current industry standards. The study mean is set at the mean of an interlaboratory proficiency testing study with outlier rejection. This CRM is intended to be used to validate analytical methods, for detection limit studies, and for analyst proficiency testing. Certified concentration is the prepared concentration traceable to NIST.

## Storage & Instructions For Use

## Required storage is 2°C to 8°C.

Fill a 1000 mL Class A volumetric flask with 950 mL of organic free reagent water.
Allow the ampule concentrate to equilibrate to room temperature.
Open the ampule and pipet exactly 1.0 mL of the concentrate into the flask with a Class A pipet.
Bring the flask to volume with reagent water.
Stopper the flask and mix well.
This represents the sample for analysis.

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#### **Traceability Information**

**Analyte Source Materials:** The highest purity analyte source materials are used in the manufacture of this CRM. Analyte source material purity and associated uncertainty has been analytically verified against appropriate NIST SRMs, where available.

**Balance:** All analytical balances are calibrated on a semiannual basis by an ISO 17025 accredited calibration laboratory and are traceable to NIST. Traceable Calibration Certificate available upon request.

All balances are checked daily by an in-house standard operating procedure. The weights used for this daily verification are calibrated annually by an ISO 17025 accredited calibration laboratory and are certified traceable to NIST. Certificate of Calibration and Traceability available upon request.

**Thermometer:** All thermometers are NIST traceable through thermometers that are calibrated annually by an ISO 17025 accredited calibration laboratory.

**Glassware**: All glassware used in the manufacture of our samples is Class A. An in-house standard operating procedure is used to verify all glassware prior to it being placed into service. Volumetric pipetors are calibrated every four months by an ISO 17025 accredited calibration laboratory.

#### Homogeneity/Stability/Expiration

This CRM was thoroughly mixed in production. Batch homogeneity was established through analyses of samples chosen at random consistent with guide ISO-35:2017. The stability of this CRM is based on short-term and longterm monitoring of the certified concentration. The expiration date

is guaranteed to be valid from the manufacture date and is based on results of long-term monitoring.

Kenneth Grzybowski

Kenneth Grzybowski, Technical Organic Manager

Erin Taylor

Erin Taylor, Quality Manager

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