

# Certificate of Analysis

## 5 VOCs Mix

<b>Catalog Number:</b> Q-10134-O	<b>Expiration:</b> 12/31/2024
<b>Lot Number:</b> 201216	<b>Solvent:</b> P&T Methanol
<b>Manufacture Date:</b> 12/16/2020	<b>Hazards:</b> Irritant, Flammable, Carcinogen

<u>Analyte</u>	<u>CAS</u>	<u>Analyte Purity</u>	<u>Gravimetric Concentration (ug/mL)</u>
Chloroform	67-66-3	99.9%	10.0 ± 0.07
Chlorodibromomethane	124-48-1	98.6%	10.0 ± 0.07
Dichlorobromomethane	75-27-4	98.4%	10.0 ± 0.07
Bromoform	75-25-2	99.7%	10.0 ± 0.07
Carbon tetrachloride	56-23-5	100%	0.50 ± 0.004

This certified reference material (CRM) was manufactured and certified by NSI Lab Solutions according to quality procedures meeting our accreditation requirements of ISO 17034:2016 and ISO/IEC 17025:2017. Our certificates and scopes of accreditation may be viewed at [www.anab.org](http://www.anab.org).

### Packaging, Storage, Instructions For Use

This CRM is packaged in a flame-sealed ampule and must be stored at 2°C to 8°C. To use this CRM, allow it to reach room temperature. Mix it gently by inversion. Inspect for precipitate. If present, sonicate for a few minutes to redissolve. Open the ampule and withdraw an aliquot appropriate for your application.

### Traceability Information

**Analyte Source Materials:** The highest purity analyte source materials are used in the manufacture of this standard. The actual purity is referenced above.

**Method:** This CRM was verified Volumetrically.

**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.

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**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 standards 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.

#### **Intended Uses**

- Calibration of analytical instruments
- Validation of analytical methods
- Preparation of working level reference materials, i.e. "check standards"
- Detection limit studies

#### **Homogeneity**

This CRM was thoroughly mixed in production and is guaranteed homogenous.

*Ken Grzybowski*

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Ken Grzybowski, Organics Department Manager

*Mark Hammersla*

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Mark Hammersla, President