

# Certificate of Analysis

## 5 Acids in Soil QC

**Catalog Number:** SCQC-228  
**Lot Number:** 200914  
**Manufacture Date:** 09/14/2020

**Expiration:** 09/30/2023  
**Matrix:** Soil  
**Hazards:** Irritant

<u>Analyte</u>	<u>CAS</u>	<u>Analyte Purity</u>	<u>Gravimetric Concentration (mg/kg)</u>			<u>Acceptance Limits (mg/kg)</u>
m-Cresol	108-39-4	99.9%	6.89	±	0.06	4.13 - 9.64
o-Cresol	95-48-7	99.6%	6.87	±	0.06	4.12 - 9.61
p-Cresol	106-44-5	99.8%	6.63	±	0.06	3.98 - 9.28
Pentachlorophenol	87-86-5	96.8%	6.58	±	0.06	3.95 - 9.22
Phenol	108-95-2	99.9%	6.90	±	0.06	4.14 - 9.66

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 sealed container and must be stored at 2°C to 8°C. To use this CRM, allow it to reach room temperature.

This sample has been designed to be totally used. Do not subsample since intra-sample homogeneity cannot be assured. Transfer the entire contents of the sample vial and rinse the vial with 2 small aliquots of extraction solvent adding rinsates to the extraction vessel. Complete the analysis according to your normal procedures.

Report results in units of mg/kg based on a 30 g sample size. No dry weight correction is needed.

**Certified concentration is based upon the gravimetric/volumetric true value when prepared according to instructions.**

**Acceptance limits are based upon USEPA solid and chemical Interlaboratory studies.**

### 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/Gravimetrically

**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.

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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 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

*Ken Grzybowski*

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Ken Grzybowski, Organics Department Manager

*Mark Hammersla*

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Mark Hammersla, President