



Certificate of Analysis

QCO-121 Base/Neutrals

Catalog Number:	QCO-121	Expiration Date:	07/31/2027
Lot Number:	N0724	Hazard:	Irritant, Flammable
Manufactured Date:	06/11/2024	Solvent:	Acetone/Methanol (1:1)

<u>Analyte</u>	<u>Study Mean</u> ug/L	<u>Certified Concentration</u> ug/L	<u>Acceptance Limits</u> ug/L
1,1-Biphenyl	0.00	0.00 +/- 0	0.00-10.0
1,2,4,5-Tetrachlorobenzene	0.00	0.00 +/- 0	0.00-10.0
1,2,4-Trichlorobenzene	103	156 +/- 1.45	31.4-182
1,2-Dichlorobenzene (o-Dichlorobenzene)	0.00	0.00 +/- 0	0.00-2.00
1,2-Diphenylhydrazine as Azobenzene	0.00	0.00 +/- 0	0.00-10.0
1,3,5-Trinitrobenzene	0.00	0.00 +/- 0	0.00-20.0
1,3-Dichlorobenzene (m-Dichlorobenzene)	55.5	101 +/- 0.940	10.1-118
1,3-Dinitrobenzene	0.00	0.00 +/- 0	0.00-1.00
1,4-Dichlorobenzene (p-Dichlorobenzene)	81.1	135 +/- 1.26	13.5-149
1,4-Dioxane	0.00	0.00 +/- 0	0.00-1.00
1,4-Naphthoquinone	0.00	0.00 +/- 0	0.00-20.0
1-Chloronaphthalene	0.00	0.00 +/- 0	0.00-0.00
1-Methylnaphthalene	0.00	0.00 +/- 0	0.00-5.00
1-Naphthylamine	0.00	0.00 +/- 0	0.00-20.0
2,2-Oxybis(1-chloropropane)	0.00	0.00 +/- 0	0.00-3.10
2,3-Dichloroaniline	0.00	0.00 +/- 0	0.00-1.00
2,4-Dinitrotoluene (2,4-DNT)	0.00	0.00 +/- 0	0.00-4.50
2,6-Dinitrotoluene (2,6-DNT)	40.2	46.9 +/- 0.437	19.1-57.0
2-Acetylaminofluorene	0.00	0.00 +/- 0	0.00-20.0
2-Chloronaphthalene	85.0	112 +/- 1.04	31.0-134
2-Methylcholanthrene	0.00	0.00 +/- 0	0.00-0.00
2-Methylnaphthalene	37.7	55.3 +/- 0.515	11.7-69.7
2-Naphthylamine	0.00	0.00 +/- 0	0.00-1.00
2-Nitroaniline	0.00	0.00 +/- 0	0.00-20.0
2-Picoline	0.00	0.00 +/- 0	0.00-20.0
3,3'-Dichlorobenzidine	0.00	0.00 +/- 0	0.00-40.0
3,3-Dimethylbenzidine	0.00	0.00 +/- 0	0.00-5.00
3-Methylcholanthrene	0.00	0.00 +/- 0	0.00-20.0
3-Nitroaniline	0.00	0.00 +/- 0	0.00-20.0
4-Aminobiphenyl	0.00	0.00 +/- 0	0.00-20.0
4-Bromophenyl phenyl ether (BDE-3)	152	176 +/- 1.64	72.8-218
4-Chloroaniline	0.00	0.00 +/- 0	0.00-20.0
4-Chlorophenyl phenylether	54.1	61.9 +/- 0.576	24.2-78.2
4-Nitroaniline	0.00	0.00 +/- 0	0.00-20.0

ISO 9001:2015 UL Registered Firm - Certificate # 10002343 QM15





nsi lab solutions

protect more. test more.

7212 ACC Blvd. | Raleigh, NC 27617 | 800.234.7837

Catalog Number: QCO-121

Lot Number: N0724

4-Nitroquinoline-1-oxide	0.00	0.00 +/- 0	0.00-0.00
5-Nitro-o-toluidine	0.00	0.00 +/- 0	0.00-20.0
7,12-Dimethylbenz(a)anthracene	0.00	0.00 +/- 0	0.00-20.0
a,a-Dimethylphenethylamine	0.00	0.00 +/- 0	0.00-0.00
Acenaphthene	67.8	80.3 +/- 0.748	28.4-97.8
Acenaphthylene	58.7	76.4 +/- 0.711	26.7-95.4
Acetophenone	0.00	0.00 +/- 0	0.00-10.0
Aniline	0.00	0.00 +/- 0	0.00-20.0
Anthracene	106	175 +/- 1.63	75.0-209
Atrazine	0.00	0.00 +/- 0	0.00-10.0
Benzaldehyde	0.00	0.00 +/- 0	0.00-10.0
Benzidine	0.00	0.00 +/- 0	0.00-40.0
Benzo(a)anthracene	156	176 +/- 1.64	85.0-211
Benzo(a)pyrene	0.00	0.00 +/- 0	0.00-2.40
Benzo(b)fluoranthene	0.00	0.00 +/- 0	0.00-7.50
Benzo(g,h,i)perylene	136	149 +/- 1.39	55.0-194
Benzo(k)fluoranthene	122	147 +/- 1.37	37.5-209
Benzyl alcohol	0.00	0.00 +/- 0	0.00-20.0
bis(2-Chloroethoxy)methane	0.00	0.00 +/- 0	0.00-3.90
bis(2-Chloroethyl)ether	119	170 +/- 1.58	43.4-202
Butyl benzyl phthalate	0.00	0.00 +/- 0	0.00-13.4
Caprolactam	0.00	0.00 +/- 0	0.00-10.0
Carbazole	0.00	0.00 +/- 0	0.00-10.0
Chlorobenzilate	0.00	0.00 +/- 0	0.00-20.0
Chrysene	36.8	39.9 +/- 0.371	18.1-51.7
Di(2-ethylhexyl) phthalate (bis(2-Ethylhexyl)phthalate, DEHP)	48.2	51.4 +/- 0.479	16.5-71.6
Di-n-butyl phthalate	124	149 +/- 1.39	52.2-191
Di-n-octyl phthalate	82.5	91.2 +/- 0.849	26.6-128
Diallate	0.00	0.00 +/- 0	0.00-0.00
Dibenzo(a,h)anthracene	61.9	71.4 +/- 0.665	25.4-94.7
Dibenzofuran	126	167 +/- 1.55	65.0-187
Diethyl phthalate	73.9	70.9 +/- 0.660	12.0-101
Dimethoate	0.00	0.00 +/- 0	0.00-1.00
Dimethyl phthalate	58.9	71.4 +/- 0.665	7.14-106
Dinoseb	0.00	0.00 +/- 0	0.00-0.00
Diphenyl ether	0.00	0.00 +/- 0	0.00-0.00
Disulfoton	0.00	0.00 +/- 0	0.00-20.0
Ethyl methanesulfonate	0.00	0.00 +/- 0	0.00-20.0
Famphur	0.00	0.00 +/- 0	0.00-0.00
Fluoranthene	130	145 +/- 1.35	64.8-176
Fluorene	64.6	77.5 +/- 0.722	32.6-93.0
Hexachlorobenzene	134	157 +/- 1.46	70.2-187
Hexachlorobutadiene	63.7	96.0 +/- 0.894	10.7-115
Hexachlorocyclopentadiene	61.6	116 +/- 1.08	11.6-152
Hexachloroethane	84.7	143 +/- 1.33	14.3-157

ISO 9001:2015 UL Registered Firm - Certificate # 10002343 QM15





nsi lab solutions

protect more. test more.

7212 ACC Blvd. | Raleigh, NC 27617 | 800.234.7837

Catalog Number: QCO-121

Lot Number: N0724

Hexachlorophene	0.00	0.00 +/- 0	0.00-0.00
Hexachloropropene	0.00	0.00 +/- 0	0.00-20.0
Indeno(1,2,3-c,d)pyrene	0.00	0.00 +/- 0	0.00-9.20
Isodrin	0.00	0.00 +/- 0	0.00-20.0
Isophorone	63.2	74.9 +/- 0.697	27.3-93.6
Isosafrole	0.00	0.00 +/- 0	0.00-20.0
Kepone	0.00	0.00 +/- 0	0.00-0.00
m-Dinitrobenzene	0.00	0.00 +/- 0	0.00-0.00
Methapyrilene	0.00	0.00 +/- 0	0.00-0.00
Methyl methanesulfonate	0.00	0.00 +/- 0	0.00-10.0
n-Decane	0.00	0.00 +/- 0	0.00-1.00
N-Nitroso-di-n-butylamine	0.00	0.00 +/- 0	0.00-20.0
N-Nitrosodi-n-propylamine	0.00	0.00 +/- 0	0.00-9.40
N-Nitrosodiethylamine	0.00	0.00 +/- 0	0.00-1.00
N-Nitrosodimethylamine	0.00	0.00 +/- 0	0.00-7.50
N-Nitrosodiphenylamine	0.00	0.00 +/- 0	0.00-5.60
N-Nitrosomorpholine	0.00	0.00 +/- 0	0.00-20.0
N-Nitrosopiperidine	0.00	0.00 +/- 0	0.00-20.0
N-Nitrosopyrrolidine	0.00	0.00 +/- 0	0.00-20.0
n-Octadecane	0.00	0.00 +/- 0	0.00-1.00
Naphthalene	0.00	0.00 +/- 0	0.00-4.50
Nitrobenzene	82.8	109 +/- 1.01	35.7-130
o,o,o-Triethyl phosphorothioate	0.00	0.00 +/- 0	0.00-20.0
o-Dinitrobenzene	0.00	42.4 +/- 0.395	29.7-55.1
o-Toluidine	0.00	0.00 +/- 0	0.00-10.0
p-Dimethylaminoazobenzene	0.00	0.00 +/- 0	0.00-0.00
p-Dinitrobenzene	0.00	0.00 +/- 0	0.00-0.00
p-Phenylenediamine	0.00	0.00 +/- 0	0.00-0.00
Parathion, ethyl	0.00	0.00 +/- 0	0.00-20.0
Parathion, methyl	0.00	0.00 +/- 0	0.00-20.0
Pentachlorobenzene	0.00	0.00 +/- 0	0.00-10.0
Pentachlorohexane	0.00	0.00 +/- 0	0.00-0.00
Pentachloronitrobenzene	0.00	0.00 +/- 0	0.00-20.0
Phenacetin	0.00	0.00 +/- 0	0.00-20.0
Phenanthrene	0.00	0.00 +/- 0	0.00-4.70
Phorate	0.00	0.00 +/- 0	0.00-20.0
Pronamide	0.00	0.00 +/- 0	0.00-20.0
Pyrene	136	152 +/- 1.42	61.9-198
Pyridine	0.00	0.00 +/- 0	0.00-10.0
Safrole	0.00	0.00 +/- 0	0.00-20.0
Sulfotepp	0.00	0.00 +/- 0	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 analyst proficiency testing.

ISO 9001:2015 UL Registered Firm - Certificate # 10002343 QM15





nsi lab solutions

protect more. test more.

7212 ACC Blvd. | Raleigh, NC 27617 | 800.234.7837

Catalog Number: QCO-121

Lot Number: N0724

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.

Catalog Number: QCO-121

Lot Number: N0724

Traceability Information

Analyte Source Materials: All analytes and matrix materials are obtained and verified by NSI from pre-qualified vendors as per ISO guidelines. Vendor identifications are proprietary, however sources of all materials used in the preparation and testing of NSI CRMs are tracked and documented.

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. 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, Certified Officer

Quentisha Forrester

Quentisha Forrester, Quality Lead

ISO 9001:2015 UL Registered Firm - Certificate # 10002343 QM15

