



# Certificate of Analysis

## Custom Standard

**Product Number:** CUS-12360

**Page:** 1 of 5

**Lot Number:** CH-3777

**Lot Issue Date:** 23-Nov-2011

**Expiration Date:** 31-Mar-2012

This Certified Reference Material (RM) was manufactured and verified in accordance with ULTRA Scientific's ISO 9001 registered quality system. A review of the gravimetric preparation data by our ISO 17025 accredited laboratory serves to verify the concentration of each analyte. The true value and uncertainty value at the 95% confidence level for each analyte, determined gravimetrically, is listed below.

Analyte	CAS#	Analyte Lot	True Value
benzo[a]pyrene	000050-32-8	RM03901-01	501.5 ± 2.5 µg/mL
benzo[ghi]perylene	000191-24-2	RM01438-11	501.5 ± 2.5 µg/mL
benzo[k]fluoranthene	000207-08-9	RM01441-02	501.5 ± 2.5 µg/mL
chrysene	000218-01-9	RM01747-01	501.5 ± 2.5 µg/mL
dibenz[a,h]anthracene	000053-70-3	RM01502	501.5 ± 2.5 µg/mL
hexachlorobenzene	000118-74-1	04416KY	501.7 ± 2.5 µg/mL
indeno[1,2,3-cd]pyrene	000193-39-5	RM03401-10	501.5 ± 2.5 µg/mL
anthracene	000120-12-7	RM03477-01	501.5 ± 2.5 µg/mL
fluoranthene	000206-44-0	NT00940	501.5 ± 2.5 µg/mL
phenanthrene	000085-01-8	RM03476-01	501.5 ± 2.5 µg/mL
acenaphthylene	000208-96-8	RM00819-02	501.5 ± 2.5 µg/mL
fluorene	000086-73-7	NT00941	501.5 ± 2.5 µg/mL
pyrene	000129-00-0	RM03479-01	501.5 ± 2.5 µg/mL
benzo[b]fluoranthene	000205-99-2	RM01444-01	501.5 ± 2.5 µg/mL
benz[a]anthracene	000056-55-3	RM01440-10	501.5 ± 2.5 µg/mL
bis(2-chloroethyl) ether	000111-44-4	RM00079-0	501.3 ± 2.5 µg/mL
nitrobenzene	000098-95-3	DI-10604DI	500.9 ± 2.5 µg/mL
hexachloroethane	000067-72-1	12604HB	501.1 ± 2.5 µg/mL
isophorone	000078-59-1	10830MR	500.0 ± 2.5 µg/mL

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William J. Leary  
Quality Assurance Manager

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bis(2-chloroethoxy)methane	000111-91-1	RM01680-0	501.3 ± 2.5 µg/mL
hexachlorobutadiene	000087-68-3	RM02247-01	501.6 ± 2.5 µg/mL
hexachlorocyclopentadiene	000077-47-4	RM02368-01	502.0 ± 2.5 µg/mL
2-chloronaphthalene	000091-58-7	FIJ02	501.1 ± 2.5 µg/mL
dimethyl phthalate	000131-11-3	RM00091-01	501.3 ± 2.5 µg/mL
2,6-dinitrotoluene	000606-20-2	08328CR	501.1 ± 2.5 µg/mL
2,4-dinitrotoluene	000121-14-2	18219TA	501.7 ± 2.5 µg/mL
diethyl phthalate	000084-66-2	NT01893	501.3 ± 2.5 µg/mL
4-chlorophenyl phenyl ether	007005-72-3	NT01369	501.3 ± 2.5 µg/mL
4-bromophenyl phenyl ether	000101-55-3	RM01804-0	501.3 ± 2.5 µg/mL
di-n-butyl phthalate	000084-74-2	RM00089-02	501.3 ± 2.5 µg/mL
butyl benzyl phthalate	000085-68-7	RM00960-01	501.3 ± 2.5 µg/mL
bis(2-ethylhexyl) phthalate	000117-81-7	D-22230	501.6 ± 2.5 µg/mL
di-n-octyl phthalate	000117-84-0	RM01159	501.3 ± 2.5 µg/mL
bis(2-chloroisopropyl) ether	000108-60-1	RM03169	500.3 ± 2.5 µg/mL
naphthalene	000091-20-3	RM02406-02	501.5 ± 2.5 µg/mL
acenaphthene	000083-32-9	RM00070-04	501.5 ± 2.5 µg/mL
2-nitroaniline	000088-74-4	RM02402-01	502.0 ± 2.5 µg/mL
4-nitroaniline	000100-01-6	RM02425-01	500.0 ± 2.5 µg/mL

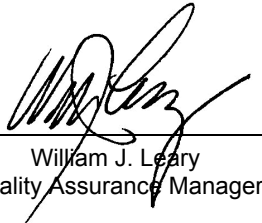
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1,2-diphenylhydrazine	000122-66-7	RM02093-01	501.0 ± 2.5 µg/mL
benzyl alcohol	000100-51-6	RM01805-0	501.3 ± 2.5 µg/mL
2,3,4,6-tetrachlorophenol	000058-90-2	ER100206-01	501.8 ± 2.5 µg/mL
3-nitroaniline	000099-09-2	RM02424-01	500.0 ± 2.5 µg/mL
dibenzofuran	000132-64-9	RM02077-01	501.3 ± 2.5 µg/mL
1,2-dinitrobenzene	000528-29-0	11417TY	500.8 ± 2.5 µg/mL
1,3-dinitrobenzene	000099-65-0	RM02086-	501.3 ± 2.5 µg/mL
1,4-dinitrobenzene	000100-25-4	RM02082-01	501.3 ± 2.5 µg/mL
1,2,4-trichlorobenzene	000120-82-1	RM00063-02	501.3 ± 2.5 µg/mL
1-methylnaphthalene	000090-12-0	12114BE	501.0 ± 2.5 µg/mL
2-methylnaphthalene	000091-57-6	RM01258-03	501.3 ± 2.5 µg/mL
1,2-dichlorobenzene	000095-50-1	08946KY	501.8 ± 2.5 µg/mL
1,3-dichlorobenzene	000541-73-1	05902LZ	501.3 ± 2.5 µg/mL
1,4-dichlorobenzene	000106-46-7	22628EB	500.3 ± 2.5 µg/mL
N-nitrosodi-n-propylamine	000621-64-7	RM00105-01	501.5 ± 2.5 µg/mL
N-nitrosodimethylamine	000062-75-9	RM00104-01	501.0 ± 2.5 µg/mL
carbazole	000086-74-8	NT01163-01	501.3 ± 2.5 µg/mL
pyridine	000110-86-1	RM02472-01	1004 ± 5 µg/mL
aniline	000062-53-3	RM01326-0	502.5 ± 2.5 µg/mL

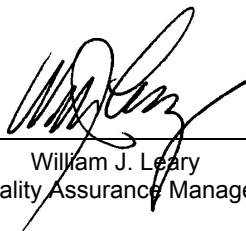
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4-chloroaniline	000106-47-8	RM01886-01	501.0 ± 2.5 µg/mL
N-nitrosodiphenylamine	000086-30-6	286003	500.5 ± 2.5 µg/mL
2,4-dimethylphenol	000105-67-9	010010	502.1 ± 2.5 µg/mL
2,4-dinitrophenol	000051-28-5	CEE-III-130	501.8 ± 2.5 µg/mL
4,6-dinitro-2-methylphenol	000534-52-1	42136/4	500.1 ± 2.5 µg/mL
4-nitrophenol	000100-02-7	5518HE	500.8 ± 2.5 µg/mL
4-chloro-3-methylphenol	000059-50-7	061657	502.1 ± 2.5 µg/mL
2-chlorophenol	000095-57-8	09624MH	501.1 ± 2.5 µg/mL
2,4-dichlorophenol	000120-83-2	05729EZ	500.4 ± 2.5 µg/mL
2-nitrophenol	000088-75-5	N980025	501.8 ± 2.5 µg/mL
pentachlorophenol	000087-86-5	RM02473-01	501.3 ± 2.5 µg/mL
phenol	000108-95-2	1373574	501.3 ± 2.5 µg/mL
2,4,6-trichlorophenol	000088-06-2	RM02568-01	501.3 ± 2.5 µg/mL
2,4,5-trichlorophenol	000095-95-4	RM02561-01	501.3 ± 2.5 µg/mL
2-methylphenol	000095-48-7	09416AA	501.5 ± 2.5 µg/mL
3-methylphenol	000108-39-4	RM01873-02	250.0 ± 1.3 µg/mL
4-methylphenol	000106-44-5	RM01988-01	251.0 ± 1.3 µg/mL
n-octadecane	000593-45-3	RM03869	501.3 ± 2.5 µg/mL
n-decane	000124-18-5	9401284	501.3 ± 2.5 µg/mL

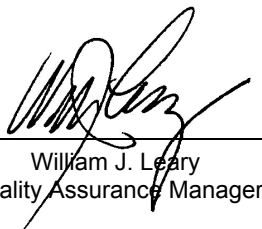
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alpha-terpineol	010482-56-1	RM02596-01	501.3 ± 2.5 µg/mL
acetophenone	000098-86-2	RM01327-0	501.3 ± 2.5 µg/mL
2,3-dichloroaniline	000608-27-5	NT02176-00	502.5 ± 2.5 µg/mL
benzidine	000092-87-5	RM01812-0	500.5 ± 2.5 µg/mL
3,3'-dichlorobenzidine	000091-94-1	RM02106-01	500.5 ± 2.5 µg/mL
benzoic acid	000065-85-0	00103JM	501.2 ± 2.5 µg/mL

**Matrix:** methylene chloride (dichloromethane)

**Storage:** Store at < 4°C.

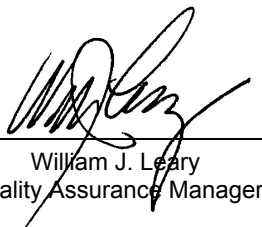
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