

## Organic Contaminants in Fortified Human Serum

Art. ID	NIST-1958
Unit	5 vials x 10,7 mL
Deliverydetails	No Dangerous Good /not restricted

### Description

This Standard Reference Material (SRM®) is intended for use in evaluating analytical methods for the determination of selected polychlorinated biphenyl (PCB) congeners, chlorinated pesticides, and polybrominated diphenyl ether (PBDE) congeners in human serum and similar matrices. Reference values are provided for selected perfluorinated compounds (PFCs), and information values are provided for selected hydroxylated compounds, polychlorinated dibenzo-p-dioxins (PCDDs), polychlorinated dibenzofurans (PCDFs), and non-ortho PCB congeners. A unit of NIST-1958 consists of five bottles of 10.7 mL of freeze-dried human serum. Before use, the serum in each bottle must be reconstituted with 10.7 mL of distilled or HPLC-grade water. /// Sample value(s) - please ask for current certificate.

Text/Information	Analyte/Parameter	CAS number	Concentration/Value	Unit	Method	Source
	2,4,4'-Trichlorobiphenyl (PCB 28)	[7012-37-5]	415 ± 17	ng/kg reco nstituted serum		
	2,2',3,5'-Tetrachlorobiphenyl (PCB 44)	[41464-39-5]	417 ± 42	ng/kg reco nstituted serum		
	2,2',4,5'-Tetrachlorobiphenyl (PCB 49)	[41464-40-8]	426 ± 17	ng/kg reco nstituted serum		
	2,2',5,5'-Tetrachlorobiphenyl (PCB 52)	[35693-99-3]	407 ± 22	ng/kg reco nstituted serum		
	2,3',4,4'-Tetrachlorobiphenyl (PCB 66)	[32598-10-0]	424 ± 22	ng/kg reco nstituted serum		
	2,4,4',5-Tetrachlorobiphenyl (PCB 74)	[32690-93-0]	422 ± 43	ng/kg reco nstituted serum		
	2,2',3,4,5'-Pentachlorobiphenyl (PCB 87)	[38380-02-8]	406 ± 41	ng/kg reco nstituted serum		
	2,2',4,4',5-Pentachlorobiphenyl (PCB 99)	[38380-01-7]	391 ± 28	ng/kg reco nstituted serum		
	2,2',4,5,5'-Pentachlorobiphenyl (PCB 101)	[37680-73-2]	415 ± 23	ng/kg reco		

biphenyl (PCB 101)				nstituted serum
2,3,3',4,4'-Pentachloro biphenyl (PCB 105)	[32598-14-4]	425 ± 26		ng/kg reco nstituted serum
2,3,3',4',6-Pentachloro biphenyl (PCB 110)	[38380-03-9]	405 ± 32		ng/kg reco nstituted serum
2,3',4,4',5-Pentachloro biphenyl (PCB 118)	[31508-00-6]	418 ± 32		ng/kg reco nstituted serum
2,2',3,3',4,4'-Hexachloro biphenyl (PCB 128)	[38380-07-3]	427 ± 6		ng/kg reco nstituted serum
2,2',3,4,4',5'-Hexachloro biphenyl (PCB 138)	[35065-28-2]	474 ± 56		ng/kg reco nstituted serum
2,2',3,4',5,5'-Hexachloro biphenyl (PCB 146)	[51908-16-8]	383 ± 28		ng/kg reco nstituted serum
2,2',3,4',5,6-Hexachloro biphenyl (PCB 149)	[38380-04-0]	379 ± 11		ng/kg reco nstituted serum
2,2',3,5,5',6-Hexachloro biphenyl (PCB 151)	[52663-63-5]	388 ± 14		ng/kg reco nstituted serum
2,2',4,4',5,5'-Hexachloro biphenyl (PCB 153)	[35065-27-1]	468 ± 18		ng/kg reco nstituted serum
2,3,3',4,4',5-Hexachloro biphenyl (PCB 156)	[38380-08-4]	424 ± 27		ng/kg reco nstituted serum
2,3,3',4,4',5'-Hexachloro biphenyl (PCB 157)	[69782-90-7]	426 ± 36		ng/kg reco nstituted serum
2,3,3',4,4',6-Hexachloro biphenyl (PCB 158)	[74472-42-7]	362 ± 45		ng/kg reco nstituted serum

2,3',4,4',5,5'-Hexachlorobiphenyl (PCB 167)	[52663-72-6]	409 ± 24	ng/kg reco nstituted serum
2,2',3,3',4,4',5-Heptachlorobiphenyl (PCB 170)	[35065-30-6]	429 ± 22	ng/kg reco nstituted serum
2,2',3,3',4,5,5'-Heptachlorobiphenyl (PCB 172)	[52663-74-8]	402 ± 26	ng/kg reco nstituted serum
2,2',3,3',4,5,6-Heptachlorobiphenyl (PCB 177)	[52663-70-4]	398 ± 12	ng/kg reco nstituted serum
2,2',3,3',5,5',6-Heptachlorobiphenyl (PCB 178)	[52663-67-9]	391 ± 13	ng/kg reco nstituted serum
2,2',3,4,4',5,5'-Heptachlorobiphenyl (PCB 180)	[35065-29-3]	470 ± 27	ng/kg reco nstituted serum
2,2',3,4,4',5',6-Heptachlorobiphenyl (PCB 183)	[52663-69-1]	412 ± 30	ng/kg reco nstituted serum
2,2',3,4',5,5',6-Heptachlorobiphenyl (PCB 187)	[52663-68-0]	417 ± 32	ng/kg reco nstituted serum
2,3,3',4,4',5,5'-Heptachlorobiphenyl (PCB 189)	[39635-31-9]	409 ± 28	ng/kg reco nstituted serum
2,2',3,3',4,4',5,5'-Octachlorobiphenyl (PCB 194)	[35694-08-7]	393 ± 15	ng/kg reco nstituted serum
2,2',3,3',4,4',5,6-Octachlorobiphenyl (PCB 195)	[52663-78-2]	392 ± 23	ng/kg reco nstituted serum
2,2',3,3',4,4',5',6-Octachlorobiphenyl (PCB 196)	[42740-50-1]	400 ± 13	ng/kg reco nstituted serum
2,2',3,3',4,5,5',6'-Octachlorobiphenyl (PCB 197)		375 ± 26	ng/kg reco nstituted

9)				serum
2,2',3,3',4,5',6,6'-Octachlorobiphenyl (IUPAC PCB 201, PCB 200)	[40186-71-8]	397 ± 6		ng/kg reco nstituted serum
2,2',3,4,4',5,5',6-Octachlorobiphenyl (PCB 203)	[52663-76-0]	413 ± 15		ng/kg reco nstituted serum
2,2',3,3',4,4',5,5',6-Nonachlorobiphenyl (PCB 206)	[40186-72-9]	373 ± 16		ng/kg reco nstituted serum
Decachlorobiphenyl (PCB 209)	[2051-24-3]	344 ± 23		ng/kg reco nstituted serum
2,2',4-Tribromodiphenyl ether (PBDE 17)	[147217-75-2]	469 ± 29		ng/kg reco nstituted serum
2,4,4'-Tribromodiphenyl ether (PBDE 28)	[41318-75-6]	470 ± 33		ng/kg reco nstituted serum
2,2',4,4'-Tetrabromodiphenyl ether (PBDE 47)	[5436-43-1]	661 ± 31		ng/kg reco nstituted serum
2,3',4,4'-Tetrabromodiphenyl ether (PBDE 66)	[189084-61-5]	447 ± 45		ng/kg reco nstituted serum
2,2',3,4,4'-Pentabromodiphenyl ether (PBDE 85)	[182346-21-0]	482 ± 37		ng/kg reco nstituted serum
2,2',4,4',5-Pentabromodiphenyl ether (PBDE 99)	[60348-60-9]	499 ± 11		ng/kg reco nstituted serum
2,2',4,4',6-Pentabromodiphenyl ether (PBDE 100)	[189084-64-8]	482 ± 24		ng/kg reco nstituted serum
2,2',4,4',5,5'-Hexabromodiphenyl ether (PBDE 153)	[68631-49-2]	460 ± 54		ng/kg reco nstituted serum
2,2',4,4',5,6'-Hexabromodiphenyl ether (PBDE 154)	[207122-15-4]	450 ± 33		ng/kg reco

odiphenyl ether (PBDE 154)			nstituted serum
2,2',3,4,4',5',6-Heptabromodiphenyl ether (PBDE 183)	[207122-16-5]	461 ± 32	ng/kg reco nstituted serum
2,2',3,3',4,4',5,5',6-Nonabromodiphenyl ether (PBDE 206)	[63936-56-1]	424 ± 12	ng/kg reco nstituted serum
Decabromodiphenyl ether (PBDE 209)	[1163-19-5]	415 ± 11	ng/kg reco nstituted serum
2,2',4,4',5,5'-Hexabromodiphenyl (PBB 153)	[59080-40-9]	431 ± 15	ng/kg reco nstituted serum
Hexachlorobenzene	[118-74-1]	450 ± 45	ng/kg reco nstituted serum
cis-Chlordane (alpha)	[5103-71-9]	420 ± 28	ng/kg reco nstituted serum
trans-Chlordane (gamma)	[5103-74-2]	422 ± 21	ng/kg reco nstituted serum
cis-Nonachlor	[5103-73-1]	431 ± 35	ng/kg reco nstituted serum
trans-Nonachlor	[39765-80-5]	479 ± 14	ng/kg reco nstituted serum
Mirex	[2385-85-5]	389 ± 54	ng/kg reco nstituted serum
Octachlorostyrene	[29082-74-4]	369 ± 11	ng/kg reco nstituted serum
2,4'-DDE	[3424-82-6]	464 ± 21	ng/kg reco nstituted serum

4,4'-DDE	[72-55-9]	1280 ± 110	ng/kg reco nstituted serum
2,4'-DDD	[53-19-0]	344 ± 32	ng/kg reco nstituted serum
4,4'-DDD	[72-54-8]	417 ± 11	ng/kg reco nstituted serum
4,4'-DDT	[50-29-3]	296 ± 24	ng/kg reco nstituted serum