

## **Fortified human milk - Organic contaminant**

Art. ID	NIST-1954
Unit	5 vials x 5 mL
Deliverydetails	Dry ice shipment /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 milk and similar matrices. Reference concentration values are provided for polychlorinated dibenzo-p-dioxins (PCDDs) and polychlorinated dibenzofurans (PCDFs), as well as some inorganic constituents. An information concentration value is provided for the PCB mixture Aroclor 1260. A unit of NIST-1954 consists of five bottles of approximately 5 mL fortified human milk. /// Sample value(s) - please ask for current certificate.

Text/Information	Analyte/Parameter	CAS number	Concentration/Value	Unit	Method	Source
	2,2',5-Trichlorobiphenyl (PCB 18)	[37680-65-2]	355 ± 45	ng/kg		
	2,4,4'-Trichlorobiphenyl (PCB 28)	[7012-37-5]	519 ± 24	ng/kg		
	2,2',3,5'-Tetrachlorobiphenyl (PCB 44)	[41464-39-5]	415 ± 35	ng/kg		
	2,2',4,5'-Tetrachlorobiphenyl (PCB 49)	[41464-40-8]	429 ± 15	ng/kg		
	2,2',5,5'-Tetrachlorobiphenyl (PCB 52)	[35693-99-3]	425 ± 40	ng/kg		
	2,3',4,4'-Tetrachlorobiphenyl (PCB 66)	[32598-10-0]	428 ± 40	ng/kg		
	2,4,4',5-Tetrachlorobiphenyl (PCB 74)	[32690-93-0]	563 ± 19	ng/kg		
	2,2',3,4,5'-Pentachlorobiphenyl (PCB 87)	[38380-02-8]	457 ± 57	ng/kg		
	2,2',4,4',5-Pentachlorobiphenyl (PCB 99)	[38380-01-7]	558 ± 38	ng/kg		
	2,2',4,5,5'-Pentachlorobiphenyl (PCB 101)	[37680-73-2]	442 ± 26	ng/kg		
	2,3,3',4,4'-Pentachlorobiphenyl (PCB 105)	[32598-14-4]	482 ± 31	ng/kg		
	2,3,3',4',6-Pentachlorobiphenyl (PCB 110)	[38380-03-9]	458 ± 34	ng/kg		
	2,3',4,4',5-Pentachlorobiphenyl (PCB 110)	[31508-00-6]	597 ± 35	ng/kg		

biphenyl (PCB 118)				
2,2',3,3',4,4'-Hexachlo	[38380-07-3]	400 ± 26		ng/kg
robiphenyl (PCB 128)				
2,2',3,4,4',5'-Hexachlo	[35065-28-2]	639 ± 34		ng/kg
robiphenyl (PCB 138)				
2,2',3,4',5,5'-Hexachlo	[51908-16-8]	492 ± 30		ng/kg
robiphenyl (PCB 146)				
2,2',3,4',5',6'-Hexachlo	[38380-04-0]	408 ± 12		ng/kg
robiphenyl (PCB 149)				
2,2',3,5,5',6'-Hexachlor	[52663-63-5]	417 ± 22		ng/kg
obiphenyl (PCB 151)				
2,2',4,4',5,5'-Hexachlo	[35065-27-1]	977 ± 49		ng/kg
robiphenyl (PCB 153)				
2,3,3',4,4',5'-Hexachlor	[38380-08-4]	511 ± 54		ng/kg
obiphenyl (PCB 156)				
2,3,3',4,4',5'-Hexachlo	[69782-90-7]	467 ± 33		ng/kg
robiphenyl (PCB 157)				
2,3,3',4,4',6'-Hexachlor	[74472-42-7]	402 ± 20		ng/kg
obiphenyl (PCB 158)				
2,3',4,4',5,5'-Hexachlo	[52663-72-6]	467 ± 53		ng/kg
robiphenyl (PCB 167)				
2,2',3,3',4,4',5'-Heptac	[35065-30-6]	507 ± 63		ng/kg
hlorobiphenyl (PCB 170)				
2,2',3,3',4,5,5'-Heptac	[52663-74-8]	443 ± 29		ng/kg
hlorobiphenyl (PCB 172)				
2,2',3,3',4',5,6'-Heptac	[52663-70-4]	447 ± 27		ng/kg
hlorobiphenyl (PCB 177)				
2,2',3,3',5,5',6'-Heptac	[52663-67-9]	449 ± 12		ng/kg
hlorobiphenyl (PCB 178)				
2,2',3,4,4',5,5'-Heptac	[35065-29-3]	696 ± 71		ng/kg
hlorobiphenyl (PCB 180)				
2,2',3,4,4',5',6'-Heptac	[52663-69-1]	445 ± 19		ng/kg
hlorobiphenyl (PCB 183)				
2,2',3,4',5,5',6'-Heptac	[52663-68-0]	517 ± 25		ng/kg
hlorobiphenyl (PCB 187)				
2,3,3',4,4',5,5'-Heptac	[39635-31-9]	432 ± 35		ng/kg
hlorobiphenyl (PCB 189)				
2,2',3,3',4,4',5,5'-Oct	[35694-08-7]	482 ± 28		ng/kg

achlorobiphenyl (PCB 19 4)				
2,2',3,3',4,4',5,6-Octa chlorobiphenyl (PCB 195 )	[52663-78-2]	461 ± 40		ng/kg
2,2',3,3',4,4',5',6-Oct achlorobiphenyl (PCB 19 6)	[42740-50-1]	872 ± 61		ng/kg
2,2',3,4,4',5,5',6-Octa chlorobiphenyl (PCB 203 )	[52663-76-0]			
2,2',3,3',4,5,5',6'-Oct achlorobiphenyl (PCB 19 9)		469 ± 35		ng/kg
2,2',3,3',4,4',5,5',6-N onachlorobiphenyl (PCB 206)	[40186-72-9]	465 ± 30		ng/kg
Decachlorobiphenyl (PCB 209)	[2051-24-3]	436 ± 36		ng/kg
2,2',4-Tribromodiphenyl ether (PBDE 17)	[147217-75-2]	401 ± 44		ng/kg
2,4,4'-Tribromodiphenyl ether (PBDE 28)	[41318-75-6]	579 ± 21		ng/kg
2',3,4-Tribromodiphenyl ether (PBDE 33)	[147217-78-5]			
2,2',4,4'-Tetrabromodip henyl ether (PBDE 47)	[5436-43-1]	2570 ± 190		ng/kg
2,3',4,4'-Tetrabromodip henyl ether (PBDE 66)	[189084-61-5]	411 ± 24		ng/kg
2,2',3,4,4'-Pentabromod iphenyl ether (PBDE 85)	[182346-21-0]	473 ± 7		ng/kg
2,2',4,4',5-Pentabromod iphenyl ether (PBDE 99)	[60348-60-9]	739 ± 41		ng/kg
2,2',4,4',6-Pentabromod iphenyl ether (PBDE 100 )	[189084-64-8]	1280 ± 90		ng/kg
2,2',4,4',5,5'-Hexabrom odiphenyl ether (PBDE 1	[68631-49-2]	1440 ± 90		ng/kg

53)				
2,2',4,4',5,6'-Hexabromodiphenyl ether (PBDE 154)	[207122-15-4]	464 ± 30		ng/kg
2,2',3,4,4',5',6-Heptabromodiphenyl ether (PBDE 183)	[207122-16-5]	511 ± 34		ng/kg
Decabromodiphenyl ether (PBDE 209)	[1163-19-5]	423 ± 24		ng/kg
2,2',4,4',5,5'-Hexabromobiphenyl (PBB 153)	[59080-40-9]	474 ±		ng/kg
Hexachlorobenzene	[118-74-1]	672 ± 41		ng/kg
beta-HCH	[319-85-7]	829 ± 38		ng/kg
gamma-HCH (Lindan)	[58-89-9]	588 ± 34		ng/kg
Oxychlordane	[27304-13-8]	1050 ± 130		ng/kg
cis-Chlordane (alpha)	[5103-71-9]	368 ± 9		ng/kg
trans-Chlordane (gamma)	[5103-74-2]	377 ± 9		ng/kg
cis-Nonachlor	[5103-73-1]	496 ± 11		ng/kg
trans-Nonachlor	[39765-80-5]	1700 ± 140		ng/kg
Mirex	[2385-85-5]	515 ± 23		ng/kg
2,4'-DDE	[3424-82-6]	400 ± 14		ng/kg
4,4'-DDE	[72-55-9]	8120 ± 350		ng/kg
2,4'-DDD	[53-19-0]	427 ± 16		ng/kg
4,4'-DDD	[72-54-8]	425 ± 15		ng/kg
2,4'-DDT	[789-02-6]	444 ± 21		ng/kg
4,4'-DDT	[50-29-3]	703 ± 74		ng/kg