

## **Mussel tissue (frozen) - PAHs, PCBs, Pesticides**

Art. ID	NIST-1974c
Unit	5 x 10 g
Deliverydetails	Dry ice shipment /not restricted

### **Description**

This Standard Reference Material (SRM®) is a frozen mussel tissue homogenate intended for use in evaluating analytical methods for the determination of selected polycyclic aromatic hydrocarbons (PAHs), polychlorinated biphenyl (PCB) congeners, chlorinated pesticides, and polybrominated diphenyl ether (PBDE) congeners in marine bivalve mollusk tissue and similar matrices. All of the constituents for which certified and reference values are provided in NIST-1974c were naturally present in the tissue material before processing. A unit of NIST-1974c consists of five jars each containing approximately 10 g (wet basis) of frozen tissue homogenate. Indicative values for selected PAHs, PCB congeners and chlorinated pesticides. /// Sample value(s) - please ask for current certificate.

Text/Information	Analyte/Parameter	CAS number	Concentration/Value	Unit	Method	Source
Wet-Mass Basis	Fluorene	[86-73-7]	2,31 ± 0,04	µg/kg		
Wet-Mass Basis	Dibenzothiophene	[132-65-0]	1,53 ± 0,02	µg/kg		
Wet-Mass Basis	Phenanthrene	[85-01-8]	19,6 ± 0,4	µg/kg		
Wet-Mass Basis	Anthracene	[120-12-7]	1,17 ± 0,08	µg/kg		
Wet-Mass Basis	1-Methylphenanthrene	[832-69-9]	3,07 ± 0,11	µg/kg		
Wet-Mass Basis	2-Methylphenanthrene	[2531-84-2]	4,56 ± 0,04	µg/kg		
Wet-Mass Basis	3-Methylphenanthrene	[832-71-3]	4,09 ± 0,03	µg/kg		
Wet-Mass Basis	9-Methylphenanthrene	[883-20-5]	2,46 ± 0,02	µg/kg		
Wet-Mass Basis	2-Methylanthracene	[613-12-7]	0,951 ± 0,007	µg/kg		
Wet-Mass Basis	Fluoranthene	[206-44-0]	45,3 ± 0,8	µg/kg		
Wet-Mass Basis	Pyrene	[129-00-0]	23,9 ± 1,6	µg/kg		
Wet-Mass Basis	Benzo(g,h,i)fluoranthene	[203-12-3]	3,03 ± 0,09	µg/kg		
Wet-Mass Basis	Benzo(c)phenanthrene	[195-19-7]	1,99 ± 0,04	µg/kg		
Wet-Mass Basis	Benzo(a)anthracene	[56-55-3]	5,69 ± 0,11	µg/kg		
Wet-Mass Basis	Benzo(k)fluoranthene	[207-08-9]	2,75 ± 0,02	µg/kg		
Wet-Mass Basis	Benzo(a)fluoranthene	[203-33-8]	0,543 ± 0,006	µg/kg		
Wet-Mass Basis	Benzo(e)pyrene	[192-97-2]	7,34 ± 0,05	µg/kg		
Wet-Mass Basis	Benzo(a)pyrene	[50-32-8]	2,32 ± 0,03	µg/kg		
Wet-Mass Basis	Perylene	[198-55-0]	5,60 ± 0,22	µg/kg		
Wet-Mass Basis	Benzo(g,h,i)perylene	[191-24-2]	2,82 ± 0,05	µg/kg		
Wet-Mass Basis	Benzo(b)chrysene	[214-17-5]	0,694 ± 0,013	µg/kg		
Wet-Mass Basis	Picene	[213-46-7]	1,36 ± 0,08	µg/kg		
Dry-Mass Basis	Fluorene	[86-73-7]	22,6 ± 0,4	µg/kg		
Dry-Mass Basis	Dibenzothiophene	[132-65-0]	15,0 ± 0,2	µg/kg		

Dry-Mass Basis	Phenanthrene	[85-01-8]	191 ± 4 1	µg/kg
Dry-Mass Basis	Anthracene	[120-12-7]	11,4 ± 0,8	µg/kg
Dry-Mass Basis	1-Methylphenanthrene	[832-69-9]	30,0 ± 1,1	µg/kg
Dry-Mass Basis	2-Methylphenanthrene	[2531-84-2]	44,5 ± 0,5	µg/kg
Dry-Mass Basis	3-Methylphenanthrene	[832-71-3]	39,9 ± 0,4	µg/kg
Dry-Mass Basis	9-Methylphenanthrene	[883-20-5]	24,0 ± 0,3	µg/kg
Dry-Mass Basis	2-Methylanthracene	[613-12-7]	9,3 ± 0,1	µg/kg
Dry-Mass Basis	Fluoranthene	[206-44-0]	442 ± 8	µg/kg
Dry-Mass Basis	Pyrene	[129-00-0]	233 ± 15	µg/kg
Dry-Mass Basis	Benzo(g,h,i)fluoranthene	[203-12-3]	29,5 ± 0,9	µg/kg
Dry-Mass Basis	Benzo(c)phenanthrene	[195-19-7]	19,4 ± 0,4	µg/kg
Dry-Mass Basis	Benzo(a)anthracene	[56-55-3]	55,5 ± 1,1	µg/kg
Dry-Mass Basis	Benzo(k)fluoranthene	[207-08-9]	26,8 ± 0,3	µg/kg
Dry-Mass Basis	Benzo(a)fluoranthene	[203-33-8]	5,30 ± 0,07	µg/kg
Dry-Mass Basis	Benzo(e)pyrene	[192-97-2]	71,6 ± 0,7	µg/kg
Dry-Mass Basis	Benzo(a)pyrene	[50-32-8]	22,6 ± 0,4	µg/kg
Dry-Mass Basis	Perylene	[198-55-0]	54,6 ± 2,2	µg/kg
Dry-Mass Basis	Benzo(g,h,i)perylene	[191-24-2]	27,6 ± 0,5	µg/kg
Dry-Mass Basis	Benzo(b)chrysene	[214-17-5]	6,77 ± 0,14	µg/kg
Dry-Mass Basis	Picene	[213-46-7]	13,2 ± 0,8	µg/kg
Wet-Mass Basis	2,4'-Dichlorobiphenyl (PCB 8)	[34883-43-7]	0,191 ± 0,003	µg/kg
Wet-Mass Basis	2,2',5'-Trichlorobiphenyl (PCB 18)	[37680-65-2]	0,589 ± 0,007	µg/kg
Wet-Mass Basis	2,4,4'-Trichlorobiphenyl (PCB 28)	[7012-37-5]	1,48 ± 0,02	µg/kg
Wet-Mass Basis	2,4',5'-Trichlorobiphenyl (PCB 31)	[16606-02-3]	1,16 ± 0,06	µg/kg
Wet-Mass Basis	2,2',3,5'-Tetrachlorobiphenyl (PCB 44)	[41464-39-5]	1,54 ± 0,08	µg/kg
Wet-Mass Basis	2,2',3,6-Tetrachlorobiphenyl (PCB 45)	[70362-45-7]	0,214 ± 0,019	µg/kg
Wet-Mass Basis	2,2',4,5'-Tetrachlorobiphenyl (PCB 49)	[41464-40-8]	1,76 ± 0,02	µg/kg
Wet-Mass Basis	2,2',5,5'-Tetrachlorobiphenyl (PCB 52)	[35693-99-3]	2,49 ± 0,06	µg/kg
Wet-Mass Basis	2,3,3',4'-Tetrachlorobiphenyl (PCB 53)	[41464-43-1]	0,663 ± 0,008	µg/kg

	phenyl (PCB 56)			
Wet-Mass Basis	2,3,4',5-Tetrachlorobiphenyl (PCB 63)	[74472-34-7]	0,137 ± 0,013	µg/kg
Wet-Mass Basis	2,3',4,4'-Tetrachlorobiphenyl (PCB 66)	[32598-10-0]	1,65 ± 0,02	µg/kg
Wet-Mass Basis	2,3',4',5-Tetrachlorobiphenyl (PCB 70)	[32598-11-1]	1,57 ± 0,05	µg/kg
Wet-Mass Basis	2,4,4',5-Tetrachlorobiphenyl (PCB 74)	[32690-93-0]	0,850 ± 0,011	µg/kg
Wet-Mass Basis	2,2',3,3',4-Pentachlorobiphenyl (PCB 82)	[52663-62-4]	0,507 ± 0,008	µg/kg
Wet-Mass Basis	2,2',3,4,5'-Pentachlorobiphenyl (PCB 87)	[38380-02-8]	2,08 ± 0,02	µg/kg
Wet-Mass Basis	2,2',3,5,5'-Pentachlorobiphenyl (PCB 92)	[52663-61-3]	1,06 ± 0,02	µg/kg
Wet-Mass Basis	2,2',3,5',6-Pentachlorobiphenyl (PCB 95)	[38379-99-6]	1,82 ± 0,02	µg/kg
Wet-Mass Basis	2,2',4,4',5-Pentachlorobiphenyl (PCB 99)	[38380-01-7]	3,55 ± 0,05	µg/kg
Wet-Mass Basis	2,2',4,5,5'-Pentachlorobiphenyl (PCB 101)	[37680-73-2]	6,67 ± 0,05	µg/kg
Wet-Mass Basis	2,3,3',4,4'-Pentachlorobiphenyl (PCB 105)	[32598-14-4]	1,57 ± 0,03	µg/kg
Wet-Mass Basis	2,3,3',4',6-Pentachlorobiphenyl (PCB 110)	[38380-03-9]	5,47 ± 0,06	µg/kg
Wet-Mass Basis	2,3',4,4',5-Pentachlorobiphenyl (PCB 118)	[31508-00-6]	4,08 ± 0,09	µg/kg
Wet-Mass Basis	2,2',3,3',4,4'-Hexachlorobiphenyl (PCB 128)	[38380-07-3]	0,801 ± 0,011	µg/kg
Wet-Mass Basis	2,2',3,4,4',5'-Hexachlorobiphenyl (PCB 138)	[35065-28-2]	4,39 ± 0,04	µg/kg
Wet-Mass Basis	2,2',3,4',5,5'-Hexachlorobiphenyl (PCB 146)	[51908-16-8]	0,904 ± 0,005	µg/kg
Wet-Mass Basis	2,2',3,4',5',6-Hexachlorobiphenyl (PCB 149)	[38380-04-0]	3,97 ± 0,04	µg/kg
Wet-Mass Basis	2,2',3,5,5',6-Hexachlorobiphenyl (PCB 151)	[52663-63-5]	1,13 ± 0,03	µg/kg
Wet-Mass Basis	2,2',4,4',5,5'-Hexachlorobiphenyl (PCB 151)	[35065-27-1]	6,76 ± 0,12	µg/kg

	robiphenyl (PCB 153)			
Wet-Mass Basis	2,2',3,3',4,6'-Hexachlorobiphenyl (PCB 132)	[38380-05-1]		µg/kg
Wet-Mass Basis	2,3,3',4,4',5-Hexachlorobiphenyl (PCB 156)	[38380-08-4]	0,253 ± 0,005	µg/kg
Wet-Mass Basis	2,3,3',4,4',6-Hexachlorobiphenyl (PCB 158)	[74472-42-7]	0,443 ± 0,003	µg/kg
Wet-Mass Basis	2,3,3',4',5,6-Hexachlorobiphenyl (PCB 163)	[74472-44-9]	1,10 ± 0,09	µg/kg
Wet-Mass Basis	2,2',3,3',4,4',5-Heptachlorobiphenyl (PCB 170)	[35065-30-6]	0,105 ± 0,009	µg/kg
Wet-Mass Basis	2,2',3,3',4',5,6-Heptachlorobiphenyl (PCB 177)	[52663-70-4]	0,696 ± 0,011	µg/kg
Wet-Mass Basis	2,2',3,3',5,5',6-Heptachlorobiphenyl (PCB 178)	[52663-67-9]	0,350 ± 0,011	µg/kg
Wet-Mass Basis	2,2',3,4,4',5,5'-Heptachlorobiphenyl (PCB 180)	[35065-29-3]	0,594 ± 0,008	µg/kg
Wet-Mass Basis	2,2',3,4,4',5',6-Heptachlorobiphenyl (PCB 183)	[52663-69-1]	0,848 ± 0,006	µg/kg
Wet-Mass Basis	2,2',3,4',5,5',6-Heptachlorobiphenyl (PCB 187)	[52663-68-0]	2,09 ± 0,05	µg/kg
Dry-Mass Basis	2,4'-Dichlorobiphenyl (PCB 8)	[34883-43-7]	1,86 ± 0,03	µg/kg
Dry-Mass Basis	2,2',5-Trichlorobiphenyl (PCB 18)	[37680-65-2]	5,75 ± 0,08	µg/kg
Dry-Mass Basis	2,4,4'-Trichlorobiphenyl (PCB 28)	[7012-37-5]	14,4 ± 0,3	µg/kg
Dry-Mass Basis	2,4',5-Trichlorobiphenyl (PCB 31)	[16606-02-3]	11,3 ± 0,6	µg/kg
Dry-Mass Basis	2,2',3,5'-Tetrachlorobiphenyl (PCB 44)	[41464-39-5]	15,1 ± 0,8	µg/kg
Dry-Mass Basis	2,2',3,6-Tetrachlorobiphenyl (PCB 45)	[70362-45-7]	2,09 ± 0,18	µg/kg
Dry-Mass Basis	2,2',4,5'-Tetrachlorobiphenyl (PCB 49)	[41464-40-8]	17,1 ± 0,3	µg/kg
Dry-Mass Basis	2,2',5,5'-Tetrachlorobiphenyl (PCB 52)	[35693-99-3]	24,3 ± 0,6	µg/kg
Dry-Mass Basis	2,3,3',4'-Tetrachlorobiphenyl (PCB 52)	[41464-43-1]	6,46 ± 0,09	µg/kg

	phenyl (PCB 56)			
Dry-Mass Basis	2,3,4',5'-Tetrachlorobiphenyl (PCB 63)	[74472-34-7]	1,34 ± 0,12	µg/kg
Dry-Mass Basis	2,3',4,4'-Tetrachlorobiphenyl (PCB 66)	[32598-10-0]	16,1 ± 0,2	µg/kg
Dry-Mass Basis	2,3',4',5'-Tetrachlorobiphenyl (PCB 70)	[32598-11-1]	15,3 ± 0,5	µg/kg
Dry-Mass Basis	2,4,4',5'-Tetrachlorobiphenyl (PCB 74)	[32690-93-0]	8,29 ± 0,12	µg/kg
Dry-Mass Basis	2,2',3,3',4'-Pentachlorobiphenyl (PCB 82)	[52663-62-4]	4,94 ± 0,09	µg/kg
Dry-Mass Basis	2,2',3,4,5'-Pentachlorobiphenyl (PCB 87)	[38380-02-8]	20,3 ± 0,2	µg/kg
Dry-Mass Basis	2,2',3,5,5'-Pentachlorobiphenyl (PCB 92)	[52663-61-3]	10,4 ± 0,2	µg/kg
Dry-Mass Basis	2,2',3,5,6'-Pentachlorobiphenyl (PCB 95)	[38379-99-6]	17,8 ± 0,3	µg/kg
Dry-Mass Basis	2,2',4,4',5'-Pentachlorobiphenyl (PCB 99)	[38380-01-7]	34,7 ± 0,6	µg/kg
Dry-Mass Basis	2,2',4,5,5'-Pentachlorobiphenyl (PCB 101)	[37680-73-2]	65,1 ± 0,7	µg/kg
Dry-Mass Basis	2,3,3',4,4'-Pentachlorobiphenyl (PCB 105)	[32598-14-4]	15,3 ± 0,3	µg/kg
Dry-Mass Basis	2,3,3',4',6'-Pentachlorobiphenyl (PCB 110)	[38380-03-9]	53,4 ± 0,7	µg/kg
Dry-Mass Basis	2,3',4,4',5'-Pentachlorobiphenyl (PCB 118)	[31508-00-6]	39,8 ± 0,9	µg/kg
Dry-Mass Basis	2,2',3,3',4,4'-Hexachlorobiphenyl (PCB 128)	[38380-07-3]	7,81 ± 0,12	µg/kg
Dry-Mass Basis	2,2',3,4,4',5'-Hexachlorobiphenyl (PCB 138)	[35065-28-2]	42,9 ± 0,5	µg/kg
Dry-Mass Basis	2,2',3,4',5,5'-Hexachlorobiphenyl (PCB 146)	[51908-16-8]	8,82 ± 0,08	µg/kg
Dry-Mass Basis	2,2',3,4',5',6'-Hexachlorobiphenyl (PCB 149)	[38380-04-0]	38,8 ± 0,5	µg/kg
Dry-Mass Basis	2,2',3,5,5',6'-Hexachlorobiphenyl (PCB 151)	[52663-63-5]	11,0 ± 0,3	µg/kg
Dry-Mass Basis	2,2',4,4',5,5'-Hexachlorobiphenyl (PCB 151)	[35065-27-1]	66,0 ± 1,3	µg/kg

	robiphenyl (PCB 153)			
Dry-Mass Basis	2,2',3,3',4,6'-Hexachlorobiphenyl (PCB 132)	[38380-05-1]		µg/kg
Dry-Mass Basis	2,3,3',4,4',5-Hexachlorobiphenyl (PCB 156)	[38380-08-4]	2,47 ± 0,05	µg/kg
Dry-Mass Basis	2,3,3',4,4',6-Hexachlorobiphenyl (PCB 158)	[74472-42-7]	4,33 ± 0,04	µg/kg
Dry-Mass Basis	2,3,3',4',5,6-Hexachlorobiphenyl (PCB 163)	[74472-44-9]	10,8 ± 0,9	µg/kg
Dry-Mass Basis	2,2',3,3',4,4',5-Heptachlorobiphenyl (PCB 170)	[35065-30-6]	1,03 ± 0,09	µg/kg
Dry-Mass Basis	2,2',3,3',4',5,6-Heptachlorobiphenyl (PCB 177)	[52663-70-4]	6,79 ± 0,12	µg/kg
Dry-Mass Basis	2,2',3,3',5,5',6-Heptachlorobiphenyl (PCB 178)	[52663-67-9]	3,42 ± 0,11	µg/kg
Dry-Mass Basis	2,2',3,4,4',5,5'-Heptachlorobiphenyl (PCB 180)	[35065-29-3]	5,79 ± 0,09	µg/kg
Dry-Mass Basis	2,2',3,4,4',5',6-Heptachlorobiphenyl (PCB 183)	[52663-69-1]	8,27 ± 0,09	µg/kg
Dry-Mass Basis	2,2',3,4',5,5',6-Heptachlorobiphenyl (PCB 187)	[52663-68-0]	20,4 ± 0,5	µg/kg
Wet-Mass Basis	Heptachlor	[76-44-8]	0,132 ± 0,006	µg/kg
Wet-Mass Basis	cis-Chlordane (alpha)	[5103-71-9]	1,20 ± 0,05	µg/kg
Wet-Mass Basis	trans-Chlordane (gamma)	[5103-74-2]	0,741 ± 0,013	µg/kg
Wet-Mass Basis	cis-Nonachlor	[5103-73-1]	0,286 ± 0,005	µg/kg
Wet-Mass Basis	trans-Nonachlor	[39765-80-5]	0,742 ± 0,005	µg/kg
Wet-Mass Basis	Dieldrin	[60-57-1]	0,285 ± 0,021	µg/kg
Wet-Mass Basis	2,4'-DDE	[3424-82-6]	0,346 ± 0,002	µg/kg
Wet-Mass Basis	4,4'-DDE	[72-55-9]	1,85 ± 0,02	µg/kg
Wet-Mass Basis	2,4'-DDD	[53-19-0]	0,398 ± 0,004	µg/kg
Wet-Mass Basis	4,4'-DDD	[72-54-8]	1,30 ± 0,09	µg/kg
Wet-Mass Basis	2,4'-DDT	[789-02-6]	0,942 ± 0,027	µg/kg
Dry-Mass Basis	Heptachlor	[76-44-8]	1,29 ± 0,06	µg/kg
Dry-Mass Basis	cis-Chlordane (alpha)	[5103-71-9]	11,7 ± 0,5	µg/kg
Dry-Mass Basis	trans-Chlordane (gamma)	[5103-74-2]	7,23 ± 0,14	µg/kg
Dry-Mass Basis	cis-Nonachlor	[5103-73-1]	2,79 ± 0,06	µg/kg
Dry-Mass Basis	trans-Nonachlor	[39765-80-5]	7,24 ± 0,08	µg/kg
Dry-Mass Basis	Dieldrin	[60-57-1]	2,78 ± 0,20	µg/kg

Dry-Mass Basis	2,4'-DDE	[3424-82-6]	3,38 ± 0,04	µg/kg
Dry-Mass Basis	4,4'-DDE	[72-55-9]	18,1 ± 0,2	µg/kg
Dry-Mass Basis	2,4'-DDD	[53-19-0]	3,88 ± 0,05	µg/kg
Dry-Mass Basis	4,4'-DDD	[72-54-8]	12,7 ± 0,8	µg/kg
Dry-Mass Basis	2,4'-DDT	[789-02-6]	9,19 ± 0,27	µg/kg
Wet-Mass Basis	2,2',4-Tribromodiphenyl ether (PBDE 17)	[147217-75-2]	0,078 ± 0,003	µg/kg
Wet-Mass Basis	2,3',4-Tribromodiphenyl ether (PBDE 25)	[147217-77-4]	0,103 ± 0,005	µg/kg
Wet-Mass Basis	2,2',4,4'-Tetrabromodiphenyl ether (PBDE 47)	[5436-43-1]	0,939 ± 0,017	µg/kg
Wet-Mass Basis	2,2',4,5'-Tetrabromodiphenyl ether (PBDE 49)	[243982-82-3]	0,140 ± 0,005	µg/kg
Wet-Mass Basis	2,2',4,4',5'-Pentabromodiphenyl ether (PBDE 99)	[60348-60-9]	0,375 ± 0,004	µg/kg
Dry-Mass Basis	2,2',4-Tribromodiphenyl ether (PBDE 17)	[147217-75-2]	0,761 ± 0,032	µg/kg
Dry-Mass Basis	2,3',4-Tribromodiphenyl ether (PBDE 25)	[147217-77-4]	1,00 ± 0,05	µg/kg
Dry-Mass Basis	2,2',4,4'-Tetrabromodiphenyl ether (PBDE 47)	[5436-43-1]	9,16 ± 0,18	µg/kg
Dry-Mass Basis	2,2',4,5'-Tetrabromodiphenyl ether (PBDE 49)	[243982-82-3]	1,37 ± 0,05	µg/kg
Dry-Mass Basis	2,2',4,4',5'-Pentabromodiphenyl ether (PBDE 99)	[60348-60-9]	3,66 ± 0,05	µg/kg