

Di-iso-nonyl Phthalate (DiNP)

Surface Water											
Location	Date	Concentration as ug/L				Single Point	Range		Data Quality	Reference	Comments
		N	Average	SD	Median		Low	High			
Europe											
Severn Trent Water, UK	1998	7	0.13				<0.2	0.3	4	Fawell et al., 2001	Detected in 1 of 7 samples
Denmark - Hove A, 5 m upstream	1996	1	0.05			<0.1			1	Vikelsøe et al., 1998	
Denmark - Hove A near mouth	1996	1	0.05			<0.1			1	Vikelsøe et al., 1998	
Denmark - Maglemøse A, 5 m upstream	1996	1	0.05			<0.1			1	Vikelsøe et al., 1998	
Denmark - Maglemøse A near mouth	1996	1	0.05			<0.1			1	Vikelsøe et al., 1998	
France - Seine estuary; 6 locations	1997	6	0.79		<0.5		<0.5	1.09	4	Elf Atochem, 1997 cited in ECB, 2003a	Detected in 2 of 6 samples
		17	0.34				<0.1	1.09			
Canada											
Alberta - N. Sask. River - downstream of WWTP effluent	2002 (Dec)	1	0.0183			0.0183			1	Alberta Environment, 2005	C9-iso-mix
Alberta - Bow River - downstream of WWTP effluent	2003 (Jan)	1	0.1768			0.1768			1	Alberta Environment, 2005	C9-iso-mix
Alberta - Oldman River - downstream of WWTP effluent	2003 (Jan)	1	0.0182			0.0182			1	Alberta Environment, 2005	C9-iso-mix
Alberta - S. Sask. River - upstream of Medicine Hat	2003 (Jan)	1	0.066			0.066			1	Alberta Environment, 2005	C9-iso-mix
Alberta - Red Deer River - downstream of WWTP effluent	2003 (Jan)	1	0.2459			0.2459			1	Alberta Environment, 2005	C9-iso-mix
B.C. - False Creek Harbour, sea water - total conc.	N/A	3	0.0909				0.0612	0.135	1	Mackintosh et al., 2006	Detected in 3 of 12 samples; average is for detected values
B.C. - False Creek Harbour, sea water - freely dissolved	N/A	3	0.0430				0.0289	0.0639	1	Mackintosh et al., 2006	Detected in 3 of 12 samples; average is for detected values
		11	0.084				0.0182	0.2459			
Japan/Asia											
Japan - 4 rivers, 2 coastal locations	1994	14	2.5		<5		<5	<5	4	API, 1994 cited in ECB, 2003a	
Japan - surface water	1996	33	2		<4		<4	<4	4	Japan MOE, 2003	Not detected in any of 33 samples
Japan - Lake Okutama	1999-2007	11	0.9				<1	<5	4	CERI, 2007	Det. limit 1 and 5 ug/L
Japan - Tama River, Hamura Intake	1999-2007	11	0.9				<1	<5	4	CERI, 2007	Det. limit 1 and 5 ug/L
Japan - Tama River, Hutago-bashi	1999-2007	11	0.9				<1	<5	4	CERI, 2007	Det. limit 1 and 5 ug/L
Japan - Tama River, Taishi-bashi	1999-2007	11	0.9				<1	<5	4	CERI, 2007	Det. limit 1 and 5 ug/L
Japan - Tokyo Bay A	1999-2007	10	0.9				<1	<5	4	CERI, 2007	Det. limit 1 and 5 ug/L
Japan - Tokyo Bay B	1999-2007	10	0.9				<1	<5	4	CERI, 2007	Det. limit 1 and 5 ug/L
Japan - Lake Biwa, Oni-ohashi	1999-2007	11	0.9				<1	<5	4	CERI, 2007	Det. limit 1 and 5 ug/L
Japan - Uji River, Kangetsu-bashi	1999-2007	11	0.9				<1	<5	4	CERI, 2007	Det. limit 1 and 5 ug/L
Japan - Yodo River, Hirakata-ohashi	1999-2007	11	0.9				<1	<5	4	CERI, 2007	Det. limit 1 and 5 ug/L
Japan - Yodo River, Denpo-ohashi	1999-2007	11	0.9				<1	<5	4	CERI, 2007	Det. limit 1 and 5 ug/L
Japan - Osaka Bay A	1999-2007	10	0.9				<1	<5	4	CERI, 2007	Det. limit 1 and 5 ug/L
Japan - Osaka Bay B	1999-2007	10	0.9				<1	<5	4	CERI, 2007	Det. limit 1 and 5 ug/L
		175	1.2				<1	<5		Mean represents one half detection limit	
Other											
Nigeria, Obafemi Awolowo University; U/S sewage discharge	2002-2003	8	1.32		<2.64		<2.64	<2.64	3	Ogunfowokan et al., 2006	Monthly samples for 8 months
Nigeria, Obafemi Awolowo University; D/S sewage discharge	2002-2003	32	1.32		<2.64		<2.64	<2.64	3	Ogunfowokan et al., 2006	Monthly samples for 8 months
Ground Water											
Location	Date	Concentration as ug/L				Single Point	Range		Data Quality	Reference	Comments
		N	Average	SD	Median		Low	High			
Japan/Asia											
Japan - Akiuno City	1999-2007	10	0.9				<1	<5	4	CERI, 2007	Det. limit 1 and 5 ug/L
Japan - Setagaya-ku	1999-2007	10	0.9				<1	<5	4	CERI, 2007	Det. limit 1 and 5 ug/L
Japan - Sumida-ku	1999-2007	10	0.9				<1	<5	4	CERI, 2007	Det. limit 1 and 5 ug/L
Japan - Uji City	1999-2007	10	0.9				<1	<5	4	CERI, 2007	Det. limit 1 and 5 ug/L
Japan - Neyagawa	1999-2007	10	0.9				<1	<5	4	CERI, 2007	Det. limit 1 and 5 ug/L
Japan - Osaka, Tennoji-ku	1999-2007	10	0.9				<1	<5	4	CERI, 2007	Det. limit 1 and 5 ug/L
		60	0.9				<1	<5		Mean represents one half detection limit	
Sediments											
Location	Date	Concentration as ug/g dry weight				Single Point	Range		Data Quality	Reference	Comments
		N	Average	SD	Median		Low	High			
Europe											
France - Seine estuary; 6 locations	1997	4	0.16		0.17		<0.1	0.25	4	Elf Atochem, 1997 cited in ECB, 2003a	Dry wt.; detected in 3 of 4 samples
Germany - Rhine River; 4 sites	N/A						0.03	1.46	4	Malisch et al., 1981 cited ECB, 2003a	Dry wt
Germany - Neckar River; 3 sites	N/A						0.43	1.05	4	Malisch et al., 1981 cited ECB, 2003a	Dry wt
Netherlands	1999	36	1.322		0.162		<0.025	11.557	1	ALcontrol, 1999	Detected in 24 of 36 samples
NL - Veenwoude	2000	1	0.36			<0.72			1	David and Sandra, 2001	Dry wt.; 13.87% dry mass
NL - Heerde	2000	1	0.08			<0.16			1	David and Sandra, 2001	Dry wt.; 62.03% dry mass
NL - Vught	2000	1	0.10			<0.20			1	David and Sandra, 2001	Dry wt.; 51.60% dry mass
NL - Noorddeinde	2000	1	0.10			<0.20			1	David and Sandra, 2001	Dry wt.; 50.73% dry mass
NL - drainage channels near new or quiet roadways	1992-93						<0.1	0.8	4	Slooff, 1993 cited in ECB, 2003a	Dry wt
NL - drainage channel near old/busy roadway	1992-93					6.7			4	Slooff, 1993 cited in ECB, 2003a	Dry wt
NL - near point source	N/A	11	0.05		<0.1		<0.1	<0.1	4	Slooff, 1993 cited in ECB, 2003a	Dry wt
Sweden - 8 lakes, 10 locations in rivers	1994	54	0.005		<0.01		<0.01	<0.01	4	Parkman & Remberger, 1995 cited in ECB, 2003a	ND in 54 samples
		109	0.46				<0.01	11.557			
Sweden - downstream of point sources	1994					150			4	Parkman & Remberger, 1995 cited in ECB, 2003a	Dry wt.
Canada											
B.C., Vancouver - False Creek Harbour	2001?						0.28	0.50	4	Lin et al., 2003	Total of 16 samples from 4 locations
B.C. - marine sediments	N/A				0.589		0.116	1.005	4	Mackintosh et al., 2002	Corrected for blanks; det. in 11 of 13 samples
B.C. - False Creek Harbour, marine sediments	N/A	12	0.483				<0.0044	0.300	1	Mackintosh et al., 2006	
Ontario, Hamilton Harbour - near outflow of STP	1997	5	0.045		<0.09		<0.09	<0.09	1	McDowell and Metcalfe, 2001	Dry wt.; 5 locations ranging from 0 to 400 m from STP outflow
		17	0.354				<0.0044	1.005			
Japan/Asia											
Japan - bottom sediment	1996	33	1.75		<3.5		<3.5	<3.5	4	Japan MOE, 2003	Dry wt.; not detected in any of 33 samples
		33	1.75				<3.5	<3.5		Mean represents one half detection limit	
Suspended Particulate Matter											
Location	Date	Concentration as ug/g dry weight				Single Point	Range		Data Quality	Reference	Comments
		N	Average	SD	Median		Low	High			
Canada											
B.C. - False Creek Harbour, marine sediments	N/A	3	27.200				14.700	50.40	1	Mackintosh et al., 2006	
		3	27.20				14.700	50.40			

Legend

Data, changes or comments added in 2009

Also used in drinking water summary

Excluded from calculated summary

Indicates average based on detection limit

BOLD Calculated category summary**Data Quality**

1 - Reliable without restrictions

2 - Reliable with restrictions

3 - Not reliable

4 - Unassignable

Soil		Concentration as ug/kg dry weight				Single	Range		Data	Reference	Comments	
Location	Date	N	Average	SD	Median	Point	Low	High	Quality			
Europe												
Denmark - Roskilde; uncultivated soil	1996	20	8		6		3	17	1	Vikelsee et al., 1999	0 to 50 cm; divided into 5 depth intervals of 10 cm each	
Denmark - Roskilde; ecologically cultivated for 40 y	1996	20	19		18		4	34	1	Vikelsee et al., 1999	0 to 50 cm; divided into 5 depth intervals of 10 cm each	
Denmark - Roskilde; eco. cultivated for past 5 y (conventional prior)	1996	20	7		7		3	13	1	Vikelsee et al., 1999	0 to 50 cm; divided into 5 depth intervals of 10 cm each	
Denmark - Roskilde; cultivated using artificial fertilizer	1996	20	17		8		4	35	1	Vikelsee et al., 1999	0 to 50 cm; divided into 5 depth intervals of 10 cm each	
Denmark - Roskilde; sludge amended soil (medium armts)	1996	20	9		8		1	16	1	Vikelsee et al., 1999	0 to 50 cm; divided into 5 depth intervals of 10 cm each	
Denmark - Roskilde; sludge amended soil (low armts)	1996	20	5		4		3	9	1	Vikelsee et al., 1999	0 to 50 cm; divided into 5 depth intervals of 10 cm each	
Netherlands	1998?	34	12.5		<25		1	<25	1	ALcontrol, 1999	Not detected in any of 34 samples	
		154	11					35				
Denmark - Roskilde; sludge amended soil (high armts)	1996	20	148		130		93	220	1	Vikelsee et al., 1999	0 to 50 cm; divided into 5 depth intervals of 10 cm each	
Denmark - Roskilde; sludge amended soil (high armts) 2 y later	1998	24	479		475		63	910	1	Vikelsee et al., 1999	0 to 60 cm; divided into 6 depth intervals of 10 cm each	
Denmark - Roskilde; meadow in runoff zone from sludge storage	1996	20	28		7		1	110	1	Vikelsee et al., 1999	0 to 50 cm; divided into 5 depth intervals of 10 cm each	
Air												
Location		Date	Concentration as ng/m3				Single	Range		Data	Reference	Comments
Location		Date	N	Average	SD	Median	Point	Low	High	Quality		
Europe												
Outdoor												
Italy - near DBP processing plant	1999	2	25					<50	<50	1	RIC, 1999	
Italy - near DBP/DEHP processing plant	1999	2	25					<50	<50	1	RIC, 1999	100 m from production and exhaust
Kortrijk-1 km upwind of incinerator	1998	1	10				<20			1	RIC, 1998	
Kortrijk-100m from Greenhouse	1998	1	10				<20			1	RIC, 1998; Tierpont, et al. 2000	
Kortrijk-10m from Greenhouse	1998	1	10				<20			1	RIC, 1998; Tierpont, et al. 2000	
Kortrijk-1m from Greenhouse	1998	1	10				<20			1	RIC, 1998; Tierpont, et al. 2000	
Kortrijk-300m downwind of incin	1998	1	10				<20			1	RIC, 1998	
Kortrijk-City Traffic	1998	1	10				<20			1	RIC, 1998	
Kortrijk-Highway Traffic	1998	1	10				<20			1	RIC, 1998	
Kortrijk-Outside Laboratory	1998	5	10					<20	<20	1	RIC, 1998	
Belgium - Rural area	1998?	3	10					<20	<20	1	Tierpont, et al. 2000	
Netherlands - Gilze-Rijen (Breda); 2 km from highway	2000	2	10					<20	<20	1	David and Sandra, 2001	Total air (vapour + aerosol); winter
Netherlands - Gilze-Rijen (Breda); 2 km from highway	2000	2	10					<20	<20	1	David and Sandra, 2001	Summer
Netherlands - Gilze-Rijen (Breda); 2 km from highway	2001	2	10					<20	<20	1	David and Sandra, 2001	Winter
Netherlands - Pernis (Rotterdam); 5 km from chemical industry	2000	2	10					<20	<20	1	David and Sandra, 2001	Winter
Netherlands - Pernis (Rotterdam); 5 km from chemical industry	2000	2	10					<20	<20	1	David and Sandra, 2001	Summer
Netherlands - Pernis (Rotterdam); 5 km from chemical industry	2001	2	10					<20	<20	1	David and Sandra, 2001	Winter
Netherlands - Pernis (Rotterdam); 5 km from chemical industry	2001	2	18					12	25	1	David and Sandra, 2001	Summer
Netherlands - Speulderveld (north of Utrecht); remote area	2000	2	10					<20	<20	1	David and Sandra, 2001	Winter
Netherlands - Speulderveld (north of Utrecht); remote area	2000	2	10					<20	<20	1	David and Sandra, 2001	Summer
Netherlands - Speulderveld (north of Utrecht); remote area	2001	2	10					<20	<20	1	David and Sandra, 2001	Winter
Netherlands - Speulderveld (north of Utrecht); remote area	2001	2	5					<10	<10	1	David and Sandra, 2001	Summer
Netherlands - Vianen (Utrecht); 100 m from highway	2000	2	10					<20	<20	1	David and Sandra, 2001	Winter
Netherlands - Vianen (Utrecht); 100 m from highway	2000	2	10					<20	<20	1	David and Sandra, 2001	Summer
Netherlands - Vianen (Utrecht); 100 m from highway	2001	2	10					<20	<20	1	David and Sandra, 2001	Winter
		47	11					<10	25			
Italy - stack emission DBP processing plant	1999	1	25					<50		1	RIC, 1999	
Italy - stack emission DBP/DEHP processing plant	1999	1	1022990					1022990		1	RIC, 1999	
Italy - unfiltered emission DBP/DEHP processing plant	1999	2	3065665					2832670	3298660	1	RIC, 1999	
Kortrijk-PVC proc exhaust	1998	1	1121670					1121670		1	RIC, 1998	
Kortrijk-Incin Exhaust, filtered	1998	1	10					<20		1	RIC, 1998	
Kortrijk-Incin Exhaust, unfiltered	1998	1	10					<20		1	RIC, 1998	
Kortrijk-PVC proc prod unit	1998	1	10305					10305		1	RIC, 1998	
Indoor												
Kortrijk-Inside Laboratory	1998	5	10					<20	<20	1	RIC, 1998; Tierpont, et al. 2000	
Kortrijk-InsideGreenhouse	1998	1	10					<20		1	RIC, 1998; Tierpont, et al. 2000	
Kortrijk-Underground Parking	1998	5	10					7	<20	1	RIC, 1998	Average represents 1/2 detection limit
Kortrijk-Underground Parking	1999	1	9					9		1	RIC, 1998	summer; parking not full
Kortrijk-Underground Parking	1999	1	7					7		1	RIC, 1998	summer; full capacity
Kortrijk-House w/15 year old PVC Floor	1998	1	10					<20		1	RIC, 1998	
Kortrijk-House w/5 year old PVC Floor	1998	1	10					<20		1	RIC, 1998	
Kortrijk - Sports Hall	1998	5	10					<20	<20	1	RIC, 1998	
Kortrijk - Kindergarten	2000	2	20					13	26	1	RIC, 2000	
Kortrijk-Flooring shop	1998	1	10					<20		1	RIC, 1998	
Inside Car 1	1998	1	10					<20		1	RIC, 1998	
Inside Car 2-New	1998	1	10					<20		1	RIC, 1998	
Inside Car 2-Old	1998	1	10					<20		1	RIC, 1998	
		26	11					7	26			
Italy - Inside DBP processing plant	1999	1	25					<50		1	RIC, 1999	Average represents 1/2 detection limit
Italy - Inside DBP/DEHP processing plant	1999	1	25					<50		1	RIC, 1999	Average represents 1/2 detection limit
Japan/Asia												
Outdoor												
Japan - Industrial areas	1998 (Oct.-Dec.)	59	7					<12	44	4	Japan MOE, 1999a	Detected in 2 of 59 samples
Japan - Residential areas	1998 (Oct.-Dec.)	60	7					<12	40	4	Japan MOE, 1999a	Detected in 1 of 60 samples
Japan - Suburbs	1998 (Oct.-Dec.)	59	8					<12	69	4	Japan MOE, 1999a	Detected in 2 of 59 samples
Japan - Industrial areas	2000 spring	6	5.5					<11	<11	4	Japan MOE, 2000a	Not detected in any of 6 samples
Japan - Residential areas	2000 spring	6	5.5					<11	<11	4	Japan MOE, 2000a	Not detected in any of 6 samples
Japan - Suburbs	2000 spring	6	5.5					<11	<11	4	Japan MOE, 2000a	Not detected in any of 6 samples
Japan	1996	18	36					<72	<72	4	Japan MOE, 2003	Not detected in any of 18 samples
Japan	2001		10					<0.4	69	4	Japan MOE, 2003	Detected in 20 of 21 samples; det. limit of 0.4 ng/m3
		214	10					<0.4	69			

Dust		Concentration as ug/kg dry weight					Single	Range		Data	Reference	Comments
Location	Date	N	Average	SD	Median	Point	Low	High	Quality			
Europe												
Belgium - House Dust	N/A	12	3.10E+04		26000		3000	1.01E+05	4	David et al., 2001		
Belgium, Kortrijk-Dust in flooring shop-1	1998	1	7.60E+04			7.60E+04			1	RIC, 1998		
Belgium, Kortrijk-Dust in flooring shop-2	1998	1	2.50E+04			2.50E+04			1	RIC, 1998		
Belgium, Kortrijk-Dust in Sports Arena indoor	1998	1	1.00E+04			1.00E+04			1	RIC, 1998		
Belgium, Kortrijk-House Dust/15yr old PVC floor	1998	1	8.00E+04			8.00E+04			1	RIC, 1998		
Belgium, Kortrijk-House Dust/5yr old PVC floor	1998	1	4.40E+04			4.40E+04			1	RIC, 1998		
Belgium, Kortrijk - Kindergarten floor	2000	1	5000			<10000			1	RIC, 2000		
Belgium, Kortrijk - Underground parking	1998	1	500			<1000			1	RIC, 1998		
Belgium, Kortrijk - Underground parking	1999	1	500			<1000			1	RIC, 1998		
Belgium - dust from homes & offices (89 locations); 2 mm fraction	2003	23	1.63E+05		1.03E+05		1.99E+04	1.56E+06	4	Greenpeace Belgium, 2004	23 individual and pooled samples; det. in all samples	
Denmark - house dust	2002	3	50		<100		<100	<100	4	Santillo, et al. 2003	Not detected in any of 3 samples	
Finland - house dust	2002	3	8.42E+04		4.30E+03		<100	2.48E+05	4	Santillo, et al. 2003	Detected in 2 of 3 samples	
France - house dust	2002	1	3.12E+05			3.12E+05			4	Santillo, et al. 2003		
Germany - Hamburg; house dust, 65 homes; 63 um fraction	N/A				7.20E+04				4	Kersten & Reich, 2003 cited in Wensing et al 2005		
Netherlands - House dust	2001	115	5.92E+04	1.06E+05	3.30E+04		<5000	1.02E+06	4	Greenpeace, 2001	95th percentile = 540,000	
Netherlands - School dust	2001	12	1.04E+05	9.84E+04	7.45E+04		<10000	3.31E+05	4	Greenpeace, 2001	90th percentile = 125,000; detected in 113 of 115 samples	
Netherlands - Office dust	2001	7	1.02E+05	7.38E+04	8.90E+04		1.70E+04	2.08E+05	4	Greenpeace, 2001	90th percentile = 217,000; detected in 11 of 12 samples	
Netherlands - Hospital, university, hotel dust	2001	3	1.05E+05	9.38E+04	6.60E+04		3.70E+04	2.12E+05	4	Greenpeace, 2001	90th percentile = 186,000	
Norway - House Dust- Oslo-Sedimented Dust	1992-93						ND	1.38E+05	2	Ole et al., 1997; cited in Gill et al., 2001		
Spain - house dust	2002	1	1.18E+05			1.18E+05			4	Santillo, et al. 2003		
Sweden - house dust	2002	2	8.00E+04		8.00E+04		7.11E+04	8.89E+04	4	Santillo, et al. 2003		
Sweden - house dust; children's bedrooms	Oct 2001-Apr 2002	346	6.39E+05		4.10E+04		<100	3.37E+05	1	Bornehag et al., 2004	Detected in 175 samples; geo. mean = 451,000	
U.K. - house dust	2002 (Oct-Nov)	29	4.85E+04		<100		<100	1.56E+06	4	Santillo, et al. 2003	Detected in 11 of 29 samples	
		565	4.19E+05				<100	1.56E+06				

Deposition		Units of ug/m2/ly					Single	Range		Data	Reference	Comments
Location	Date	N	Average	SD	Median	Point	Low	High	Quality			
Europe												
Denmark, Roskilde, Lille Valby meteorological station	1996-97	15	17	26			<40	109	1	Vikelsøe et al., 2001, 1998		
		15	17				<40	109				

Precipitation		Concentration as ug/L					Single	Range		Data	Reference	Comments
Location	Date	N	Average	SD	Median	Point	Low	High	Quality			
Europe												
NL (47), Germany (2), Belgium (1); wet and dry deposition	2003 (Feb-Apr)	50	4.214	7.108	2.399		<0.100	48.29	1	Peters, 2003	Detected in 98% of samples; MDL 0.100 ug/L	
		50	4.214				<0.100	48.29				

Wastewater		Concentration as ug/L					Single	Range		Data	Reference	Comments
Location	Date	N	Average	SD	Median	Point	Low	High	Quality			
Europe												
Belgium - Roesselare; WWTP influent	2001	16	21.49		19.07		7.00	59.89	4	ECPI, 2001		
Belgium - Roesselare; WWTP effluent	2001	16	1.94		1.44		0.44	4.72	4	ECPI, 2001		
Belgium - Negenmanneke; WWTP influent, domestic	2002	3	4.95		1.98		<0.5	12.61	4	ECPI, 2002		
Belgium - Negenmanneke; WWTP effluent, domestic	2002	3	0.25		<0.5		<0.5	<0.5	4	ECPI, 2002		
Denmark - Avedøere WWTP, influent	2002 (10-11)	3	0.13	0.10	<0.20		<0.10	0.24	4	Jacobsen et al., 2004	Grab samples	
Denmark - Avedøere WWTP, effluent	2002 (10-11)	3	0.05		<0.10		<0.10	<0.10	4	Jacobsen et al., 2004	Grab samples	
Denmark - Roskilde, car wash	1996-97	26	269	191			<50	510	1	Vikelsøe et al., 1998		
Denmark - Roskilde, hospital	1996	6	25				<50		1	Vikelsøe et al., 1998		
Denmark - Roskilde, kindergarten	1996	2	25			<20000			1	Vikelsøe et al., 1998		
Denmark - Roskilde, industrial laundry	1996	2	25				<50		1	Vikelsøe et al., 1998		
Denmark - Herlev, adhesives industry	1996	2	25				7500	8400	1	Vikelsøe et al., 1998	Identified below limit of detection of 20000 ug/L	
UK - Petersfield, Hampshire - domestic STW raw sewage	2001-2002	23	0.10	0.10			<0.1	8400	4	Oliver et al., 2005		
		101	75				<0.1	8400				
Canada												
Alberta - effluent from 7 WWTPs	Dec 02-Jun 03	8	0.345	0.391	0.164		0.030	1.108	1	Alberta Environment, 2005	C9-iso-mix	
		8	0.345				0.030	1.108				
Other												
Nigeria, Obafemi Awolowo University; sewage lagoon	2002-2003	30	1,600		<2.64		<2.64	17,760	3	Ogunfowokan et al., 2006	Monthly samples for 8 months	

Sludge		Concentration as ug/kg dry weight					Single	Range		Data	Reference	Comments
Location	Date	N	Average	SD	Median	Point	Low	High	Quality			
Europe												
Belgium - Roesselare; WWTP	2001	6	9200		8600		5370	14460	4	ECPI, 2001	dry wt.	
Denmark - sewage sludge	N/A	14	4500	5700	2800		370	23000	4	Vikelsøe et al., 1999	dry wt.	
Germany - digested sludge from 5 STPs	N/A	5	9094				4760	13900	4	Kobli et al. 1997 cited in ECB, 2003a	dry wt.	
Germany - sewage sludge from STP	1987-1990	1	27000				11000	72000	4	Weisser, 1992 cited in ECB, 2003a	dry wt.	
Germany - aerobic pre-treatment - raw sludge	1987-1990						15000	18000	4	Weisser, 1992 cited in ECB, 2003a	dry wt.	
Germany - aerobic pre-treatment - treated sludge	1987-1990						15000	17000	4	Weisser, 1992 cited in ECB, 2003a	dry wt.	
Germany - anaerobic fermentation - raw sludge	1987-1990						31000	43000	4	Weisser, 1992 cited in ECB, 2003a	dry wt.	
Germany - anaerobic fermentation - treated sludge	1987-1990						49000	58000	4	Weisser, 1992 cited in ECB, 2003a	dry wt.	
NL: primary sludge; 2 municipal WWTPs in rural areas	1992-93						<1000	21000	4	Slooff, 1993 cited in ECB, 2003a	dry wt.	
NL: primary sludge; 2 municipal WWTPs in urban areas	1992-93						<2000	7800	4	Slooff, 1993 cited in ECB, 2003a	dry wt.	
UK - Petersfield, Hampshire; rural town sewage treatment works	2001-2002	32	70	70			370	72000	4	Oliver et al., 2005	Dry wt.; raw sludge - thickened primary sed. tank & humus tank sludges	
		58	3326				370	72000				
Belgium - Negenmanneke; WWTP, domestic	2002	3	1.47		1.75		<0.5	2.41	4	ECPI, 2002	Units are ug/L	

Drinking Water		Concentration in ug/L					Single	Range		Data	Reference	Comments
Location	Date	N	Average	SD	Median	Point	Low	High	Quality			
Europe												
Denmark, Roskilde - tapwater in NERI lab	1996	1	0.05			<0.1			1	Viksebo et al., 1998		
		1	0.05				<0.1		1	Mean represents one half detection limit		
Japan/Asia												
Japan - 3 cities; groundwater and drinking water	1993-94	9	2.5				<5	<5	4	cited in ECB, 2003a		
Japan - Kakogawa tap water	1999-2007	10	0.9				<1	<5	4	CERI, 2007	Det. limit 1 and 5 ug/L	
Japan - Osaka, Nishiyodogawa-ku tap water	1999-2007	10	0.9				<1	<5	4	CERI, 2007	Det. limit 1 and 5 ug/L	
Japan - Yokohama, Sakae-ku tap water	1999-2007	10	0.9				<1	<5	4	CERI, 2007	Det. limit 1 and 5 ug/L	
Japan - Sumida-ku tap water	1999-2007	10	0.9				<1	<5	4	CERI, 2007	Det. limit 1 and 5 ug/L	
		49	1.2				<1	<5	4	Mean represents one half detection limit		
Food												
Type	Date	N	Average	SD	Median	Single	Low	High	Data	Reference	Comments	
BEVERAGES												
Sake - Japan	2000-2001	5	0.0015		<0.003		<0.003	<0.003	1	Tsumura et al., 2002	LOD=0.003	
Wine - Japan	2000-2001	3	0.0015		<0.003		<0.003	<0.003	1	Tsumura et al., 2002	LOD=0.003	
Beer - Japan	2000-2001	3	0.01		<0.02		<0.02	<0.02	1	Tsumura et al., 2002	LOD=0.02	
		11	0.004				<0.003	<0.02	1	Mean represents one half detection limit		
DAIRY (excl. milk)												
Cheese - Japan	2000-2001	3	0.03		<0.06		<0.06	<0.06	1	Tsumura et al., 2002	LOD=0.06	
Ice cream - Japan	2000-2001	3	0.03		<0.06		<0.06	<0.06	1	Tsumura et al., 2002	LOD=0.06	
		6	0.03				<0.06	<0.06	1	Mean represents one half detection limit		
FATS & OILS												
Butter - Japan	2000-2001	3	0.1		<0.2		<0.2	<0.2	1	Tsumura et al., 2002	LOD=0.2	
Margarine - Japan	2000-2001	3	0.1		<0.2		<0.2	<0.2	1	Tsumura et al., 2002	LOD=0.2	
Fat spread - Japan	2000-2001	3	0.1		<0.2		<0.2	<0.2	1	Tsumura et al., 2002	LOD=0.2	
Vegetable oil - Japan	2000-2001	8	0.1		<0.2		<0.2	<0.2	1	Tsumura et al., 2002	LOD=0.2	
		17	0.1				<0.2	<0.2	1	Mean represents one half detection limit		
FISH												
Bream and Roach - NL	1998	25	0.002		<0.004		<0.004	<0.004	1	David and Sandra, 2001	Wet wt; Ave = 1/2 DL	
Roach - NL; 0.77 to 1.58% fat	2000	3	0.002		<0.004		<0.004	<0.004	1	David and Sandra, 2001	Wet wt; Ave = 1/2 DL	
Molluscs - NL	2000	3	0.007		<0.010		<0.010	0.012	1	David and Sandra, 2001	Wet wt	
False Creek harbour, B.C., Canada - Green Algae	1999	9	0.0055						1	Mackintosh, et al. 2004	Wet wt; ave lipid content = 0.2%	
False Creek harbour, B.C., Canada - Brown Algae	1999	9	0.00061						1	Mackintosh, et al. 2004	Wet wt; ave lipid content = 0.08%	
False Creek harbour, B.C., Canada - Plankton	1999	9	0.0099						1	Mackintosh, et al. 2004	Wet wt; ave lipid content = 0.09%	
False Creek harbour, B.C., Canada - Blue Mussels	1999	9	0.0342						1	Mackintosh, et al. 2004	Wet wt; ave lipid content = 1.3%	
False Creek harbour, B.C., Canada - Pacific Oysters	1999	9	0.0105						1	Mackintosh, et al. 2004	Wet wt; ave lipid content = 2.1%	
False Creek harbour, B.C., Canada - Geoduck Clams	1999	9	0.0359						1	Mackintosh, et al. 2004	Wet wt; ave lipid content = 0.7%	
False Creek harbour, B.C., Canada - Manila Clams	1999	9				<0.00104			1	Mackintosh, et al. 2004	Wet wt; ave lipid content = 1.2%; not detected in any of 9 samples	
False Creek harbour, B.C., Canada - Dungeness Crabs	1999	9	0.0349						1	Mackintosh, et al. 2004	Wet wt; ave lipid content = 8%	
False Creek harbour, B.C., Canada - Purple Seastar	1999	9				<0.00104			1	Mackintosh, et al. 2004	Wet wt; ave lipid content = 2.5%; not detected in any of 9 samples	
False Creek harbour, B.C., Canada - Juvenile Shiner Perch	1999	9	0.0124						1	Mackintosh, et al. 2004	Wet wt; ave lipid content = 2.1%	
False Creek harbour, B.C., Canada - Pacific Herring	1999	9				<0.00104			1	Mackintosh, et al. 2004	Wet wt; ave lipid content = 3.2%; not detected in any of 9 samples	
False Creek harbour, B.C., Canada - Pile Perch	1999	9	0.00227						1	Mackintosh, et al. 2004	Wet wt; ave lipid content = 0.7%	
False Creek harbour, B.C., Canada - Striped Seaperch	1999	9	0.00969						1	Mackintosh, et al. 2004	Wet wt; ave lipid content = 0.17%	
False Creek harbour, B.C., Canada - Pacific Staghorn Sculpin	1999	9	0.0023						1	Mackintosh, et al. 2004	Wet wt; ave lipid content = 0.3%	
False Creek harbour, B.C., Canada - English Sole	1999	9	0.0018						1	Mackintosh, et al. 2004	Wet wt; ave lipid content = 0.5%	
False Creek harbour, B.C., Canada - Whitespotted Greenling	1999	9				<0.00104			1	Mackintosh, et al. 2004	Wet wt; ave lipid content = 0.6%; not detected in any of 9 samples	
False Creek harbour, B.C., Canada - Spiny Dogfish - muscle	1999	9				<0.00104			1	Mackintosh, et al. 2004	Wet wt; ave lipid content = 8.3%; not detected in any of 9 samples	
False Creek harbour, B.C., Canada - Spiny Dogfish - liver	1999	9				<0.00104			1	Mackintosh, et al. 2004	Wet wt; ave lipid content = 62%; not detected in any of 9 samples	
False Creek harbour, B.C., Canada - Spiny Dogfish - embryo	1999	9				<0.00104			1	Mackintosh, et al. 2004	Wet wt; ave lipid content = 17%; not detected in any of 9 samples	
False Creek harbour, B.C., Canada - Surf Scoters	1999	9	0.00565						1	Mackintosh, et al. 2004	Wet wt; ave lipid content = 2.2%	
Fish paste (fried kamaboko) - Japan, Osaka	2000	2	0.58		0.64		0.56	0.6	1	Tsumura et al., 2001b	Prepared for consumption	
Mussel	N/A	3	0.57				<0.5	0.810	4	Elf Atochem, 1997 cited in ECB, 2003a	Dry wt.; detected in 2 of 3 samples	
		153	0.028				0.00061	0.81	1			
GRAIN												
Dry noodles - Japan	2000-2001	3	0.03		<0.06		<0.06	<0.06	1	Tsumura et al., 2002	LOD=0.06	
Rice - Japan, Osaka	2000	1	0.12			0.12			1	Tsumura et al., 2001b	Prepared for consumption	
Fried noodle - Japan, Osaka	2000	2	0.15				0.05	0.24	1	Tsumura et al., 2001b	Prepared for consumption	
Spaghetti - Japan, Osaka	2000	2	0.56				0.43	0.68	1	Tsumura et al., 2001b	Prepared for consumption	
		8	0.20				0.05	0.68	1			
MILK												
Milk - Japan	2000-2001	3	0.015		<0.03		<0.03	<0.03	1	Tsumura et al., 2002	LOD=0.03	
Milk - direct from cows; Netherlands	1998	29	0.005		<0.01		<0.01	<0.01	1	David and Sandra, 2001	Collected from 2 farms in spring; % fat = 1.1 to 9.7	
Milk - direct from cows; Netherlands	2000	3	0.005		0.006		0.005	0.011	1	David and Sandra, 2001	Collected from 2 farms in autumn; % fat = 1.8 to 2.0	
		35	0.006				0.005	<0.03	1	Mean represents one half detection limit		
NUTS/BEANS												
Peanut butter - Denmark	2004					99			3	Pedersen et al., 2008	Glass jars with PE containing gaskets; food withdrawn from market	
OTHER FOODS												
Cookies - Japan	2000-2001	3	0.03		<0.06		<0.06	<0.06	1	Tsumura et al., 2002	LOD=0.06; 3 samples	
Chocolate - Japan	2000-2001	3	0.03		<0.06		<0.06	<0.06	1	Tsumura et al., 2002	LOD=0.06; 3 samples	
Solby pastry - Japan	2000-2001	3	0.03		<0.06		<0.06	<0.06	1	Tsumura et al., 2002	LOD=0.06; 3 samples	
Hamburger set - Japan	2000-2001	3	0.003		<0.006		<0.006	<0.006	1	Tsumura et al., 2002	LOD=0.006; 3 samples	
Gyu-don (boiled rice with spiced beef & onion) - Japan	2000-2001	3	0.005		<0.01		<0.01	<0.01	1	Tsumura et al., 2002	LOD=0.01; 3 samples	
Pizza - Japan	2000-2001	3	0.005		<0.01		<0.01	<0.01	1	Tsumura et al., 2002	LOD=0.01; 3 samples	
Retort-pouched food - Japan	2000-2001	11	0.003		<0.006		<0.006	<0.006	1	Tsumura et al., 2002	LOD=0.006; 11 samples	
		29	0.012				<0.006	NA	1	Mean represents one half detection limit		
Garlic, cheese, olives in oil	N/A	6	87	53	103		15	150	3	Fankhauser-Noi and Grob, 2006	Migration from gasket of lid into food	

POULTRY

Chicken (fried) -Japan, Osaka	2000	2	0.63		0.46	0.79	1	Tsumura et al., 2001b	Prepared for consumption
		2	0.63		0.46	0.79			

PROCESSED MEAT

Minced meat (Shumai) -Japan, Osaka	2000	2	0.19		0.13	0.24	1	Tsumura et al., 2001b	Prepared for consumption
		2	0.19		0.13	0.24			

VEGETABLES

Potato (croquette) -Japan, Osaka	2000	2	0.34		0.25	0.42	1	Tsumura et al., 2001b	Prepared for consumption
Radish, boiled dry -Japan, Osaka	2000	1	0.10	0.10			1	Tsumura et al., 2001b	Prepared for consumption
Radish, salted -Japan, Osaka	2000	1	0.06	0.06			1	Tsumura et al., 2001b	Prepared for consumption
		4	0.21		0.06	0.42			

TOTAL DIET SAMPLES

Germany, Munich and area - composite diet (solid and liquid)	2005 (April-Oct)			<0.10	<0.10		4	Fromme et al., 2007b	Detected in 4 of 350 samples (1%); det. limit 0.10 to 0.15 ug/g fresh wt.
Japan, Osaka - Set lunches from 10 restaurants	1999				ND	0.087	1	Tsumura et al., 2001b	Detected in 1 of 10 samples
Japan, Osaka - Packed lunches from 10 stores	1999-2000			0.052	ND	1.819	1	Tsumura et al., 2001b	Detected in 9 of 16 samples
Japan- Osaka, Aichi, & Niigata - 21 hospital meals, Lab A	1999	21	0.0925	0.029	<0.004	0.626	1	Tsumura et al., 2001a	Detection limit 0.004 ug/g
Japan- Osaka, Aichi, & Niigata - 21 hospital meals, Lab B	1999	21	0.0893	<0.006	<0.006	<0.006	1	Tsumura et al., 2001a	Detection limit 0.006 ug/g
Japan- Osaka, Aichi, & Niigata - 21 hospital meals, Lab C	1999	21	0.0968	<0.010	<0.010	0.025	1	Tsumura et al., 2001a	Detection limit 0.010 ug/g
Japan- Osaka, Aichi, & Niigata - 21 hospital meals, Lab A	2001	21	0.002	<0.004	<0.004	<0.004	1	Tsumura et al., 2003	Detection limit 0.004 ug/g
Japan- Osaka, Aichi, & Niigata - 21 hospital meals, Lab B	2001	21	0.002	<0.005	<0.005	0.024	1	Tsumura et al., 2003	Detection limit 0.005 ug/g
Japan- Osaka, Aichi, & Niigata - 21 hospital meals, Lab C	2001	21	0.003	<0.006	<0.006	<0.006	1	Tsumura et al., 2003	Detection limit 0.006 ug/g
		126	0.018		<0.004	1.819			

INFANT FORMULA - powder

Infant Formula-U.K.	1998	98	0.05	<0.1	<0.1	<0.1	1	MAFF 1996 & 1998 cited ECB, 2003a	
Infant formula - Japan	2000-2001	6	0.01	<0.02	<0.02	<0.02	1	Tsumura et al., 2002	LOD=0.02; 6 samples
		104	0.05		<0.02	<0.1		Mean represents one half detection limit	

BABY FOOD

Retort-pouched baby food - Japan	2000-2001			<0.006	<0.006	0.064	1	Tsumura et al., 2002	LOD=0.006; 13 samples
Baby snack - Japan	2000-2001			0.17	<0.006	1.83	1	Tsumura et al., 2002	5 samples
			NA		<0.006	1.83			

Consumer Products

Location/Type	Date	N	Average	SD	Median	Single Point	Range Low	High	Data Quality	Reference	Comments
Europe											
Austria, Germany, Switzerland - PVC toys and childcare products	2007 (Jan-June)	25	26				0.7	41	4	Biedermann-Brem et al., 2008	Det. in 25 of 252 samples; conc. are for detected samples only
		25	26				0.7	41			

Vegetation

	Date	N	Average	SD	Median	Single Point	Range Low	High	Data Quality	Reference	Comments
Grasses, sugar beet leaves, maize, kale - Netherlands	1999	53	77		<100		<100	528	1	David and Sandra, 2001	wet wt; 20 locations, different seasons; ave dry mass = 25.28%
Cattle feed - Netherlands	1999	2	50				<100	<100	1	David and Sandra, 2001	wet wt; 2 locations, ave dry mass =93.5%
		55	76				<100	528			
Algae	N/A	1	50		<100				4	Elf Atochem, 1997 cited in ECB, 2003a	Dry wt.

Human Blood

	Date	N	Average	SD	Median	Single Point	Range Low	High	Data Quality	Reference	Comments
Europe - 17 countries; 47 volunteers (male and female)	Dec. 2003	45	0.023	0.026	<0.020		<0.020	0.14	1	WWF-UK, 2004	Whole blood; 0.25% lipid; detected in 17 of 45 samples; 90th perc = 0.047
		45	0.023				<0.020	0.14			

Di-iso-decyl Phthalate (DIDP)

Surface Water											
Location	Date	Concentration as ug/L				Single Point	Range		Data Quality	Reference	Comments
		N	Average	SD	Median		Low	High			
Europe											
Severn Trent Water, UK	1998	7	0.19				<0.2	0.4	4	Fawell et al., 2001	Detected in 3 of 7 samples
France - Seine estuary; 6 locations	1997	6	0.5		<0.5		<0.5	1.08	4	Elf Atochem, 1997 cited in ECB, 2003b	Detected in 2 of 6 samples
		13	0.33				<0.2	1.08			
Canada											
Alberta - N. Sask. River - downstream of WWTP effluent	2002 (Dec)	1	0.0419			0.0419			1	Alberta Environment, 2005	C10-iso-mix
Alberta - Bow River - downstream of WWTP effluent	2003 (Jan)	1	0.1284			0.1284			1	Alberta Environment, 2005	C10-iso-mix
Alberta - Oldman River - downstream of WWTP effluent	2003 (Jan)	1	0.0269			0.0269			1	Alberta Environment, 2005	C10-iso-mix
Alberta - S. Sask. River - upstream of Medicine Hat	2003 (Jan)	1	0.0431			0.0431			1	Alberta Environment, 2005	C10-iso-mix
Alberta - Red Deer River - downstream of WWTP effluent	2003 (Jan)	1	0.0331			0.0331			1	Alberta Environment, 2005	C10-iso-mix
B.C. - False Creek Harbour, sea water - total conc.	N/A	9	0.0767				0.0453	0.129	1	Mackintosh et al., 2006	Detected in 9 of 12 samples; average is for detected values
B.C. - False Creek Harbour, sea water - freely dissolved	N/A	9	0.0260				0.0153	0.0437	1	Mackintosh et al., 2006	Detected in 9 of 12 samples; average is for detected values
		23	0.052				0.0153	0.129			
Japan/Asia											
Japan - surface water	1974		NA				<0.05	<10	4	Japan MOE, 2003	Not detected in any of 250 samples
							<0.05	<10			
China - Jingmi Canal	N/A						<5.8		4	Cai et al., 2003	Elevated detection limit

Sediments											
Location	Date	Concentration as ug/g dry weight				Single Point	Range		Data Quality	Reference	Comments
		N	Average	SD	Median		Low	High			
Europe											
France - Seine estuary; 6 locations	1997	6	0.0975				<0.1	0.19	4	Elf Atochem, 1997 cited in ECB, 2003b	Dry wt; detected in 3 of 6 samples
Germany - sediment in industrial harbour	N/A	1	14			14			4	Alberti et al., 2000 cited in ECB, 2003b	Dry wt.
Netherlands	1999	36	2.875		<0.015		<0.015	42.28	1	ALcontrol, 1999	Detected in 12 of 36 samples
NL: Veenoude	2000	1	0.36			<0.72			1	David and Sandra, 2001	Dry wt; 13.87% dry mass
NL: Heerde	2000	1	0.08			<0.16			1	David and Sandra, 2001	Dry wt; 62.03% dry mass
NL: Vught	2000	1	0.10			<0.20			1	David and Sandra, 2001	Dry wt; 51.60% dry mass
NL: Noordeinde	2000	1	0.10			<0.20			1	David and Sandra, 2001	Dry wt; 50.73% dry mass
Sweden - 8 lakes and 10 river locations	1994	54	0.005				<0.01	<0.01	4	Remberger, 2000 cited in ECB, 2003b	Dry wt.
Sweden - downstream of 2 point source discharges	1994	2	0.013				<0.01	0.02	4	Remberger, 2000 cited in ECB, 2003b	Dry wt.
		103	1.16				<0.01	42.28			
Germany - sediment in rain retention basins from motorways	N/A	2	900				650	1150	4	Alberti et al., 2000 cited in ECB, 2003b	Dry wt.
Canada											
Vancouver, B.C. - False Creek Harbour	2001?						0.22	0.40	4	Lin et al, 2003	Total of 16 samples from 4 locations
B.C. - marine sediments	N/A				0.438		0.165	0.764	4	Mackintosh et al., 2002	Corrected for blanks; det. in 11 of 13 samples
B.C. - False Creek Harbour, marine sediments	N/A	12	0.385				<0.0046	0.589	1	Mackintosh et al., 2006	
		12	0.385				<0.0046	0.764			
Japan/Asia											
Japan - bottom sediment	1974		NA				<0.00006	<3.1	4	Japan MOE, 2003	Dry wt.; not detected in any of 227 samples
							<0.00006	<3.1			

Suspended Particulate Matter											
Location	Date	Concentration as ug/g dry weight				Single Point	Range		Data Quality	Reference	Comments
		N	Average	SD	Median		Low	High			
Europe											
Germany - Rhine and Wupper Rivers	N/A	3	8.4		9.2		6	10	4	Alberti et al., 2000 cited ECB, 2003b	Suspended particulate matter, dry weight
		3	8.4				6	10			
Canada											
B.C. - False Creek Harbour, marine sediments	N/A	9	43.200				23.300	79.90	1	Mackintosh et al., 2006	
		9	43.20				23.30	79.90			

Legend

- Data, changes or comments added in 2009
- Also used in drinking water summary
- Excluded from calculated summary
- Indicates average based on detection limit
- BOLD** Calculated category summary

Data Quality

- 1 - Reliable without restrictions
- 2 - Reliable with restrictions
- 3 - Not reliable
- 4 - Unassignable

Soil		Concentration as ug/kg dry weight				Single	Data					
Location	Date	N	Average	SD	Median	Point	Low	High	Quality	Reference	Comments	
Europe												
Netherlands	1998?	34	7.5		<15		<15	<15	1	ALcontrol, 1999	Not detected in any of 34 samples	
		34	7.5				<15	<15		Mean represents one half detection limit		
Air												
Air		Concentration as ng/m3				Single	Range		Data			
Location	Date	N	Average	SD	Median	Point	Low	High	Quality	Reference	Comments	
Europe												
Outdoor												
Italy - near DBP processing plant	1999	2	25				<50	<50	1	RIC, 1999		
Italy - near DBP/DEHP processing plant	1999	2	25				<50	<50	1	RIC, 1999	100 m from production and exhaust	
Kortrijk-100m from Greenhouse	1998	1	10			<20			1	RIC, 1998; Tienpont, et al. 2000		
Kortrijk-10m from Greenhouse	1998	1	10			<20			1	RIC, 1998; Tienpont, et al. 2000		
Kortrijk-1m from Greenhouse	1998	1	10			<20			1	RIC, 1998; Tienpont, et al. 2000		
Kortrijk-City Traffic	1998	1	10			<20			1	RIC, 1998		
Kortrijk-Highway Traffic	1998	1	10			<20			1	RIC, 1998		
Kortrijk-Outside Laboratory	1998	5	10				<20	<20	1	RIC, 1998		
Belgium - Rural area	1998?	3	10				<20	<20	1	Tienpont, et al. 2000		
Netherlands - Gilze-Rijen (Breda); 2 km from highway	2000	2	10				<20	<20	1	David and Sandra, 2001	Total air (vapour + aerosol); winter	
Netherlands - Gilze-Rijen (Breda); 2 km from highway	2000	2	10				<20	<20	1	David and Sandra, 2001	Summer	
Netherlands - Gilze-Rijen (Breda); 2 km from highway	2001	2	10				<20	<20	1	David and Sandra, 2001	Winter	
Netherlands - Pernis (Rotterdam); 5 km from chemical industry	2000	2	10				<20	<20	1	David and Sandra, 2001	Winter	
Netherlands - Pernis (Rotterdam); 5 km from chemical industry	2000	2	10				<20	<20	1	David and Sandra, 2001	Summer	
Netherlands - Pernis (Rotterdam); 5 km from chemical industry	2001	2	10				<20	<20	1	David and Sandra, 2001	Winter	
Netherlands - Pernis (Rotterdam); 5 km from chemical industry	2001	2	22				19	25	1	David and Sandra, 2001	Summer	
Netherlands - Speulderveld (north of Utrecht); remote area	2000	2	10				<20	<20	1	David and Sandra, 2001	Winter	
Netherlands - Speulderveld (north of Utrecht); remote area	2000	2	10				<20	<20	1	David and Sandra, 2001	Summer	
Netherlands - Speulderveld (north of Utrecht); remote area	2001	2	10				<20	<20	1	David and Sandra, 2001	Winter	
Netherlands - Speulderveld (north of Utrecht); remote area	2001	2	5				<10	<10	1	David and Sandra, 2001	Summer	
Netherlands - Vianen (Utrecht); 100 m from highway	2000	2	10				<20	<20	1	David and Sandra, 2001	Winter	
Netherlands - Vianen (Utrecht); 100 m from highway	2000	2	10				<20	<20	1	David and Sandra, 2001	Summer	
Netherlands - Vianen (Utrecht); 100 m from highway	2001	2	10				<20	<20	1	David and Sandra, 2001	Winter	
		45	12				<10	25				
Italy - stack emission DBP processing plant	1999	1	25			<50			1	RIC, 1999		
Italy - stack emission DBP/DEHP processing plant	1999	1	1022990			1022990			1	RIC, 1999		
Italy - unfiltered emission DBP/DEHP processing plant	1999	2	3065665				2832670	3298660	1	RIC, 1999		
Italy - near DBP/DEHP processing plant	1999	2	25				<50	<50	1	RIC, 1999	100 m from production and exhaust	
Indoor												
Kortrijk-Inside Laboratory	1998	5	10				<20	<20	1	RIC, 1998; Tienpont, et al. 2000		
Kortrijk-InsideGreenhouse	1998	1	10			<20			1	RIC, 1998; Tienpont, et al. 2000		
Kortrijk-Underground Parking	1998	5	10				<5	<20	1	RIC, 1998	Average represents 1/2 detection limit	
Kortrijk-Underground Parking	1999	1	2.5			<5			1	RIC, 1998	summer; parking not full	
Kortrijk-Underground Parking	1999	1	2.5			<5			1	RIC, 1998	summer; full capacity	
Kortrijk-House w/15 year old PVC Floor	1998	1	10			<20			1	RIC, 1998		
Kortrijk-House w/5 year old PVC Floor	1998	1	10			<20			1	RIC, 1998		
Kortrijk - Sports Hall	1998	5	10				<20	<20	1	RIC, 1998		
Kortrijk - Kindergarten	2000	2	11				7	15	1	RIC, 2000		
Kortrijk-Flooring shop	1998	1	10			<20			1	RIC, 1998		
Inside Car 1	1998	1	10			<20			1	RIC, 1998		
Inside Car 2-New	1998	1	10			<20			1	RIC, 1998		
Inside Car 2-Old	1998	1	10			<20			1	RIC, 1998		
		26	10				<5	15				
Italy - Inside DBP processing plant	1999	1	25			<50			1	RIC, 1999		
Italy - Inside DBP/DEHP processing plant	1999	1	25			<50			1	RIC, 1999		
Japan/Asia												
Outdoor												
Japan	2001		NA				<0.3	1.3	4	Japan MOE, 2003	Detected in 12 of 21 samples; det. limit of 0.3 ng/m3	
							<0.3	1.3				

Dust		Concentration as ug/Kg dry weight					Single	Range		Data	Reference	Comments
Location	Date	N	Average	SD	Median	Point	Low	High	Quality			
Europe												
Belgium - House Dust	N/A	12	3.40E+04		1.90E+04		3000	1.16E+05	4	David et al., 2001		
Belgium, Kortrijk-Dust in flooring shop-1	1998	1	3.10E+04			3.10E+04			1	RIC, 1998		
Belgium, Kortrijk-Dust in flooring shop-2	1998	1	2.20E+04			2.20E+04			1	RIC, 1998		
Belgium, Kortrijk-Dust in Sports Arena indoor	1998	1	1.10E+04			1.10E+04			1	RIC, 1998		
Belgium, Kortrijk-House Dust/15yr old PVC floor	1998	1	6.00E+04			6.00E+04			1	RIC, 1998		
Belgium, Kortrijk-House Dust/5yr old PVC floor	1998	1	3.80E+04			3.80E+04			1	RIC, 1998		
Belgium, Kortrijk - Kindergarten floor	2000	1	5000			<10000			1	RIC, 2000		
Belgium, Kortrijk - Underground parking	1998	1	500			<1000			1	RIC, 1998		
Belgium, Kortrijk - Underground parking	1999	1	500			<1000			1	RIC, 1998		
Belgium - dust from homes & offices (69 locations); 2 mm fraction	2003	23	6.60E+04		6.12E+04		1.26E+04	1.72E+05	4	Greenpeace Belgium, 2004	23 individual and pooled samples; det. in all samples	
Denmark - house dust	2002	3	50		<100		<100	<100	4	Santillo, et al. 2003	Not detected in any of 3 samples	
Finland - house dust	2002	3	2.25E+04		<100		<100	6.74E+04	4	Santillo, et al. 2003	Detected in 1 of 3 samples	
France - house dust	2002	1	50			<100			4	Santillo, et al. 2003		
Netherlands - House dust	2001	115	5.34E+04	1.16E+05	2.30E+04		<5000	7.83E+05	4	Greenpeace, 2001	90th percentile = 101,000; detected in 107 of 115 samples	
Netherlands - School dust	2001	12	4.63E+04	3.26E+04	3.55E+04		<10000	1.30E+05	4	Greenpeace, 2001	90th percentile = 68,000; detected in 11 of 12 samples	
Netherlands - Office dust	2001	7	1.66E+05	1.44E+05	1.15E+05		2.80E+04	3.84E+05	4	Greenpeace, 2001	90th percentile = 362,000	
Netherlands - Hospital, university, hotel dust	2001	3	1.34E+05	6.99E+04	1.59E+05		5.50E+04	1.88E+05	4	Greenpeace, 2001	90th percentile = 182,000	
Spain - house dust	2002	1	50			<100			4	Santillo, et al. 2003		
Sweden - house dust	2002	2	50		<100		<100	<100	4	Santillo, et al. 2003		
U.K. - house dust	2002 (Oct-Nov)	29	2.08E+04		<100		<100	1.57E+05	4	Santillo, et al. 2003	Detected in 11 of 29 samples	
		219	5.04E+04				<100	7.83E+05				

Precipitation		Concentration as ug/L					Single	Range		Data	Reference	Comments
Location	Date	N	Average	SD	Median	Point	Low	High	Quality			
Europe												
NL (47), Germany (2), Belgium (1); wet and dry deposition	2003 (Feb-Apr)	50	2.22		<0.100		<0.100	98.43	1	Peters, 2003	Det. in 6% of samples; median of meas. conc. = 8.768 ug/L	
		50	2.22				<0.100	98.43				
Japan/Asia												
Japan - rain	1974		N/A				<0.06	<10	4	Japan MOE, 2003	Not detected in any of 73 samples	
			N/A				<0.06	<10				

Wastewater		Concentration as ug/L					Single	Range		Data	Reference	Comments
Location	Date	N	Average	SD	Median	Point	Low	High	Quality			
Europe												
Belgium - Roeselare; WWTP influent	2001	16	5.23		<10.00		3.87	10.32	4	ECPI, 2001		
Belgium - Roeselare; WWTP effluent	2001	16	1.53		1.11		0.38	4.38	4	ECPI, 2001		
Belgium - Negenmanneke; WWTP influent, domestic	2002	3	4.4		2.00		1.10	10.09	4	ECPI, 2002		
Belgium - Negenmanneke; WWTP effluent, domestic	2002	3	0.25		<0.5		<0.5	<0.5	4	ECPI, 2002		
		38	3.2				0.38	10.32				
Canada												
Alberta - effluent from 7 WWTPs	Dec 02-Jun 03	8	0.327	0.446	0.138		0.022	1.296	1	Alberta Environment, 2005	C10-iso-mix	
		8	0.327				0.022	1.296				

Sludge		Concentration as ug/kg dry weight					Single	Range		Data	Reference	Comments
Location	Date	N	Average	SD	Median	Point	Low	High	Quality			
Europe												
Belgium - Roeselare; WWTP	2001	6	5100		5750		2970	6620	4	ECPI, 2001	dry wt.	
Germany - sewage sludge from STP	1987-1990	1	28000				13000	83000	4	Weisser, 1992 cited in ECB, 2003b	dry wt.	
Germany - aerobic pre-treatment - raw sludge	1987-1990						12000	16000	4	Weisser, 1992 cited in ECB, 2003b	dry wt.	
Germany - aerobic pre-treatment - treated sludge	1987-1990						12000	14000	4	Weisser, 1992 cited in ECB, 2003b	dry wt.	
Germany - anaerobic fermentation - raw sludge	1987-1990						29000	44000	4	Weisser, 1992 cited in ECB, 2003b	dry wt.	
Germany - anaerobic fermentation - treated sludge	1987-1990						55000	64000	4	Weisser, 1992 cited in ECB, 2003b	dry wt.	
Germany	N/A	5	5402		5200		3800	8030	4	Koib et al., 1997 cited in ECB, 2003b	dry wt.	
		12	7134				2970	83000				
Belgium - Negenmanneke; WWTP, domestic	2002	3	1.06		1.2		0.61	1.38	4	ECPI, 2002	Units are ug/L	

Drinking Water		Concentration as ug/L			Single	Range		Data		Reference	
Location	Date	N	Average	SD	Median	Point	Low	High	Quality		
Japan/Asia											
China - Beijing, tap water	N/A					<5.8			4	Cai et al., 2003	Elevated detection limit
Food											
Type	Date	N	Average	SD	Median	Point	Low	High	Quality	Reference	Comments
EGGS											
Eggs	1993	2	0.005				<0.01	<0.01	2	MAFF Report #82, March, 1996	Prepared for consumption
		2	0.005				<0.01	<0.01		Mean represents one half detection limit	
FATS & OILS											
Olive oil - Italy	N/A	1	0.25				<0.5	<0.5	4	Ezerskis et al., 2007	
		1	0.25				<0.5	<0.5		Mean represents one half detection limit	
Olive oil - UK	N/A	15					<0.024	0.190	3	Bradley et al., 2007	Exptl study, evaluated migration from non-stick cookware; heated for 30 to 90 min.
FISH											
Fish - Japan	1974						<0.00005	<5	4	Japan MOE, 2003	Wet wt.; not detected in any of 200 samples; det. limit 0.00005 to 5.0 ug/g
Bream and Roach - NL	1998	25	0.002		<0.004		<0.004	<0.004	1	David and Sandra, 2001	Wet wt; Ave = 1/2 DL
Roach - NL: 0.77 to 1.58% fat	2000	3	0.002		<0.004		<0.004	<0.004	1	David and Sandra, 2001	Wet wt; Ave = 1/2 DL
Molluscs - NL	2000	3	0.007		<0.010		<0.010	0.011	1	David and Sandra, 2001	Wet wt
False Creek harbour, B.C., Canada - Green Algae	1999	9	0.0055						1	Mackintosh, et al. 2004	Wet wt; ave lipid content = 0.2%
False Creek harbour, B.C., Canada - Brown Algae	1999	9	0.0002						1	Mackintosh, et al. 2004	Wet wt; ave lipid content = 0.08%
False Creek harbour, B.C., Canada - Plankton	1999	9	0.007						1	Mackintosh, et al. 2004	Wet wt; ave lipid content = 0.09%
False Creek harbour, B.C., Canada - Blue Mussels	1999	9	0.005						1	Mackintosh, et al. 2004	Wet wt; ave lipid content = 1.3%
False Creek harbour, B.C., Canada - Pacific Oysters	1999	9	0.010						1	Mackintosh, et al. 2004	Wet wt; ave lipid content = 2.1%
False Creek harbour, B.C., Canada - Geoduck Clams	1999	9	0.017						1	Mackintosh, et al. 2004	Wet wt; ave lipid content = 0.7%
False Creek harbour, B.C., Canada - Manila Clams	1999	9	0.021						1	Mackintosh, et al. 2004	Wet wt; ave lipid content = 1.2%
False Creek harbour, B.C., Canada - Dungeness Crabs	1999	9	0.013						1	Mackintosh, et al. 2004	Wet wt; ave lipid content = 8%
False Creek harbour, B.C., Canada - Purple Seastar	1999	9	0.0011						1	Mackintosh, et al. 2004	Wet wt; ave lipid content = 2.5%
False Creek harbour, B.C., Canada - Juvenile Shiner Perch	1999	9	0.0084						1	Mackintosh, et al. 2004	Wet wt; ave lipid content = 2.1%
False Creek harbour, B.C., Canada - Pacific Herring	1999						<0.00159		1	Mackintosh, et al. 2004	Wet wt; ave lipid content = 3.2%; not detected in any of 9 samples
False Creek harbour, B.C., Canada - Pile Perch	1999						<0.00159		1	Mackintosh, et al. 2004	Wet wt; ave lipid content = 0.7%; not detected in any of 9 samples
False Creek harbour, B.C., Canada - Striped Seaperch	1999	9	0.023						1	Mackintosh, et al. 2004	Wet wt; ave lipid content = 0.17%
False Creek harbour, B.C., Canada - Pacific Staghorn Sculpin	1999	9	0.0009						1	Mackintosh, et al. 2004	Wet wt; ave lipid content = 0.3%
False Creek harbour, B.C., Canada - English Sole	1999	9	0.0011						1	Mackintosh, et al. 2004	Wet wt; ave lipid content = 0.5%
False Creek harbour, B.C., Canada - Whitespotted Greenling	1999	9	0.0011						1	Mackintosh, et al. 2004	Wet wt; ave lipid content = 0.6%
False Creek harbour, B.C., Canada - Spiny Dogfish- muscle	1999	9	0.0071						1	Mackintosh, et al. 2004	Wet wt; ave lipid content = 8.3%
False Creek harbour, B.C., Canada - Spiny Dogfish- liver	1999	9	0.040						1	Mackintosh, et al. 2004	Wet wt; ave lipid content = 62%
False Creek harbour, B.C., Canada - Spiny Dogfish- embryo	1999	9	0.0010						1	Mackintosh, et al. 2004	Wet wt; ave lipid content = 17%
False Creek harbour, B.C., Canada - Surf Scoters	1999	9	0.031						1	Mackintosh, et al. 2004	Wet wt; ave lipid content = 2.2%
Mussel	N/A	3	0.53		<0.5		<0.2	1.240	4	Eil Atochem, 1997 cited in ECB, 2003b	Dry wt.; detected in 1 of 3 samples
		196	0.017				<0.00005	1.24			
MEAT											
Carcass Meat	1993	2	0.005				<0.01	<0.01	2	MAFF Report #82, March, 1996	Prepared for consumption
		2	0.005				<0.01	<0.01		Mean represents one half detection limit	
MILK											
Milk - direct from cows; Netherlands	1998	29	0.005		<0.01		<0.01	<0.01	1	David and Sandra, 2001	Collected from 2 farms in spring; % fat = 1.1 to 9.7
Milk - direct from cows; Netherlands	2000	3	0.005		<0.01		<0.01	<0.01	1	David and Sandra, 2001	Collected from 2 farms in autumn; % fat = 1.8 to 2.0
		32	0.005				<0.01	<0.01		Mean represents one half detection limit	
OTHER FOODS											
Tomato sauce - Italy	N/A	1	0.25				<0.5	<0.5	4	Ezerskis et al., 2007	
Pesto sauce - Italy	N/A	1	0.25				<0.5	<0.5	4	Ezerskis et al., 2007	
		2	0.25				<0.5	<0.5		Mean represents one half detection limit	
Olives in oil, tomato sauce	N/A	9	202	214	140		55	705	3	Fankhauser-Noti and Grob, 2006	Migration from gasket of lid into food
Garlic, tomatoes, etc.in oil - Denmark	2004						<1	173	3	Pedersen et al., 2008	Foods in glass jars with PE containing gaskets; food withdrawn from market
POULTRY											
Poultry	1993	2	0.005				<0.01	<0.01	2	MAFF Report #82, March, 1996	Prepared for consumption
		2	0.005				<0.01	<0.01		Mean represents one half detection limit	

INFANT FORMULA - powder

Infant Formula-BF1, whey powder	1998	2	0.05		<0.1	<0.1	<0.1	1	MAFF Rpt-168, December, 1998	
Infant Formula-BF2, casein powder	1998	2	0.05		<0.1	<0.1	<0.1	1	MAFF Rpt-168, December, 1998	
Infant Formula-C&G Plus, casein powder	1998	4	0.05		<0.1	<0.1	<0.1	1	MAFF Rpt-168, December, 1998	
Infant Formula-C&G Premium, whey powder	1998	4	0.05		<0.1	<0.1	<0.1	1	MAFF Rpt-168, December, 1998	
Infant Formula-C&GI, soya powder	1998	2	0.05		<0.1	<0.1	<0.1	1	MAFF Rpt-168, December, 1998	
Infant Formula-FFM, whey powder	1998	2	0.05		<0.1	<0.1	<0.1	1	MAFF Rpt-168, December, 1998	
Infant Formula-FSF, soya powder	1998	2	0.05		<0.1	<0.1	<0.1	1	MAFF Rpt-168, December, 1998	
Infant Formula-FSM, casein powder	1998	2	0.05		<0.1	<0.1	<0.1	1	MAFF Rpt-168, December, 1998	
Infant Formula-MA, whey powder	1998	2	0.05		<0.1	<0.1	<0.1	1	MAFF Rpt-168, December, 1998	
Infant Formula-MM, casein powder	1998	2	0.05		<0.1	<0.1	<0.1	1	MAFF Rpt-168, December, 1998	
Infant Formula-SMA Gold, whey powder	1998	4	0.05		<0.1	<0.1	<0.1	1	MAFF Rpt-168, December, 1998	
Infant Formula-SMA White, casein powder	1998	5	0.05		<0.1	<0.1	<0.1	1	MAFF Rpt-168, December, 1998	
Infant Formula-SMAW, soya powder	1998	2	0.05		<0.1	<0.1	<0.1	1	MAFF Rpt-168, December, 1998	
		35	0.05			<0.1	<0.1			Mean represents one half detection limit

INFANT FORMULA - liquid

Infant Formula-SMAW, ready-to-feed liquid	1998	4	0.015		<0.03	<0.03	<0.03	1	MAFF Rpt-168, December, 1998	
		4	0.015			<0.03	<0.03			Mean represents one half detection limit

Consumer Products											
Location/Type	Date	N	Average	SD	Median	Single Point	Range Low	Range High	Data Quality	Reference	Comments
Concentration in % w/w											
Europe											
Austria, Germany, Switzerland - PVC toys and childcare products	2007 (Jan-June)	4	24				93	32	4	Biedermann-Brem et al., 2008	Det. In 4 of 252 samples; conc. are for detected samples only
		4	24				93	32			

Vegetation											
	Date	N	Average	SD	Median	Single Point	Range Low	Range High	Data Quality	Reference	Comments
Grasses, sugar beet leaves, maize, kale - Netherlands	1999	53	82		<100		<100	324	1	David and Sandra, 2001	wet wt; 20 locations, different seasons; ave dry mass = 25.28%
Cattle feed - Netherlands	1999	2	50				<100	<100	1	David and Sandra, 2001	wet wt; 2 locations, ave dry mass =93.5%
		55	81				<100	324			
Algae	N/A	1	270			270			4	Eil Atochem, 1997 cited in ECB, 2003b	Dry wt.
Plankton - Japan	1974	2	5				<10	<10	4	Japan MOE, 2003	Not detected in either of 2 samples

Human Blood											
	Date	N	Average	SD	Median	Single Point	Range Low	Range High	Data Quality	Reference	Comments
Europe - 17 countries; 47 volunteers (male and female)	Dec. 2003	45	0.026	0.082	<0.020		<0.020	0.55	1	WWF-UK, 2004	Whole blood; 0.25% lipid; detected in 4 of 45 samples; 90th perc = <0.020
		45	0.026				<0.020	0.55			