ダイオキシン類・ポリ塩化ビフェニル分析用標準液

PCDDs/PCDFs/DL-PCBs and Total PCBs Analytycal Solution

2012

WELLINGTON
LABORATORIES

STANDARDS FOR ENVIRONMENTAL
TESTING AND RESEARCH

Wellington Laboratories Japan Inc.
www.well-labs.co.jp

Welcome to the 2012 New Catalogue

平素は、Wellington Laboratories社標準品をご愛顧頂き誠に有難うございます。

さて、今般「ダイオキシン類・ポリ塩化ビフェニル分析用　標準液」を一冊に纏めましたカタログを作成致しましたので、ご案内申し上げます。

近年、ダイオキシン類の分析法も多様化し、又ポリ塩化ビフェニルも絶縁油中の微量PCBの処理に伴い、各種分析法に則した分析用標準液のニーズが高まって来ています。

今回のカタログでは、「ダイオキシン類・ポリ塩化ビフェニル検量線作成用標準液」「検量線作成用標準液SUPPORT　SOLUTIONS」を項目別に掲載し、巻末に「ADDITIONAL PRODUCTS」として、PAHs・HO-PCBs・MeO-PCBs・Chlorobenzenes・Chlorophenolsを掲載致しました。

Wellington Laboratories社では、今後共多様化する分析法に対し、より精度高く、又簡便にご使用頂ける標準品を目指し、環境用標準品のリーディングカンパニーとして、今後も努力してまいります。

何卒、Wellington Laboratories社標準品を、今までに増しご愛顧頂けますようお願い申し上げます。

2012年6月

株式会社ウエリントン ラボラトリーズ ジャパン
加　坂　達　司
木　田　孝　文

WELLINGTON LABORATORIES
Standards for Environmental Testing and Research

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The Registration covers the Quality Management System as it applies to the design and provision of reference standards and chemicals for use in environmental analysis and toxicological research.

Certificate No:	CERT-0051698	Original Certification Date:	December 30, 2004
File No:	1039334	Current Certification Date:	December 28, 2010
Issue Date:	November 11, 2010	Certificate Expiry Date:	December 27, 2013

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今後も皆様に満足していただける製品を提供させていただきますので、よろしくお願い致します。

ダイオキシン類検量線作成用標準液

Calibration Solutions

PCDDs/PCDFs/DL-PCBs Mixture
PCDDs/PCDFs Mixture

DFP-CVS-B10

Catalogue Number	Product (nonane solution)	Qty/Conc
確 DFP-CVS-B10-Set1	CS1/CS2/CS3/CS4/CS5	1Kit (5×200 µl ampoules)
確 DFP-CVS-B10-Set2	CS2/CS3/CS4/CS5/CS6	1Kit (5×200 µl ampoules)
確 DFP-B10-CS1	CS1	200 µl
確 DFP-B10-CS2	CS2	200 µl
確 DFP-B10-CS3	CS3	200 µl
確 DFP-B10-CS4	CS4	200 µl
確 DFP-B10-CS5	CS5	200 µl
確 DFP-B10-CS6	CS6	200 µl
確 DFP-B10-CS7	CS7	200 µl

Native PCDDs & PCDFs		CS1 (ng/ml)	CS2 (ng/ml)	CS3 (ng/ml)	CS4 (ng/ml)	CS5 (ng/ml)	CS6 (ng/ml)	CS7 (ng/ml)
1,3,6,8-Tetrachlorodibenzo-p-dioxin		0.1	0.5	2	10	50	200	500
1,2,8,9-Tetrachlorodibenzo-p-dioxin		0.1	0.5	2	10	50	200	500
2,3,7,8-Tetrachlorodibenzo-p-dioxin		0.1	0.5	2	10	50	200	500
1,2,3,7,8-Pentachlorodibenzo-p-dioxin		0.1	0.5	2	10	50	200	500
1,2,3,4,7,8-Hexachlorodibenzo-p-dioxin		0.2	1	4	20	100	400	1000
1,2,3,6,7,8-Hexachlorodibenzo-p-dioxin		0.2	1	4	20	100	400	1000
1,2,3,7,8,9-Hexachlorodibenzo-p-dioxin		0.2	1	4	20	100	400	1000
1,2,3,4,6,7,8-Heptachlorodibenzo-p-dioxin		0.2	1	4	20	100	400	1000
Octachlorodibenzo-p-dioxin		0.5	2.5	10	50	250	1000	2500
1,3,6,8-Tetrachlorodibenzofuran		0.1	0.5	2	10	50	200	500
1,2,8,9-Tetrachlorodibenzofuran		0.1	0.5	2	10	50	200	500
2,3,7,8-Tetrachlorodibenzofuran		0.1	0.5	2	10	50	200	500
1,2,3,7,8-Pentachlorodibenzofuran		0.1	0.5	2	10	50	200	500
2,3,4,7,8-Pentachlorodibenzofuran		0.1	0.5	2	10	50	200	500
1,2,3,4,7,8-Hexachlorodibenzofuran		0.2	1	4	20	100	400	1000
1,2,3,6,7,8-Hexachlorodibenzofuran		0.2	1	4	20	100	400	1000
1,2,3,7,8,9-Hexachlorodibenzofuran		0.2	1	4	20	100	400	1000
2,3,4,6,7,8-Hexachlorodibenzofuran		0.2	1	4	20	100	400	1000
1,2,3,4,6,7,8-Heptachlorodibenzofuran		0.2	1	4	20	100	400	1000
1,2,3,4,7,8,9-Heptachlorodibenzofuran		0.2	1	4	20	100	400	1000
Octachlorodibenzofuran		0.5	2.5	10	50	250	1000	2500
Native PCB Congeners	***IUPAC***							
3,3',4,4'-Tetrachlorobiphenyl	*77*	0.2	1	4	20	100	400	1000
3,4,4',5-Tetrachlorobiphenyl	*81*	0.2	1	4	20	100	400	1000
2,3,3',4,4'-Pentachlorobiphenyl	*105*	0.2	1	4	20	100	400	1000
2,3,4,4',5-Pentachlorobiphenyl	*114*	0.2	1	4	20	100	400	1000
2,3',4,4',5-Pentachlorobiphenyl	*118*	0.2	1	4	20	100	400	1000
2',3,4,4',5-Pentachlorobiphenyl	*123*	0.2	1	4	20	100	400	1000
3,3',4,4',5-Pentachlorobiphenyl	*126*	0.2	1	4	20	100	400	1000
2,3,3',4,4',5-Hexachlorobiphenyl	*156*	0.2	1	4	20	100	400	1000
2,3,3',4,4',5'-Hexachlorobiphenyl	*157*	0.2	1	4	20	100	400	1000
2,3',4,4',5,5'-Hexachlorobiphenyl	*167*	0.2	1	4	20	100	400	1000
3,3',4,4',5,5'-Hexachlorobiphenyl	*169*	0.2	1	4	20	100	400	1000
2,2',3,3',4,4',5-Heptachlorobiphenyl	*170*	0.2	1	4	20	100	400	1000
2,2',3,4,4',5,5'-Heptachlorobiphenyl	*180*	0.2	1	4	20	100	400	1000
2,3,3',4,4',5,5'-Heptachlorobiphenyl	*189*	0.2	1	4	20	100	400	1000

Continued on next page

確 第一種特定化学物質

Mass-Labelled PCDDs & PCDFs		CS1 (ng/ml)	CS2 (ng/ml)	CS3 (ng/ml)	CS4 (ng/ml)	CS5 (ng/ml)	CS6 (ng/ml)	CS7 (ng/ml)
Surrogate/Extraction Spikes								
1,3,6,8-Tetrachloro[$^{13}C_{12}$]dibenzo-p-dioxin		10	10	10	10	10	10	10
2,3,7,8-Tetrachloro[$^{13}C_{12}$]dibenzo-p-dioxin		10	10	10	10	10	10	10
1,2,3,7,8-Pentachloro[$^{13}C_{12}$]dibenzo-p-dioxin		10	10	10	10	10	10	10
1,2,3,4,7,8-Hexachloro[$^{13}C_{12}$]dibenzo-p-dioxin		10	10	10	10	10	10	10
1,2,3,6,7,8-Hexachloro[$^{13}C_{12}$]dibenzo-p-dioxin		10	10	10	10	10	10	10
1,2,3,7,8,9-Hexachloro[$^{13}C_{12}$]dibenzo-p-dioxin		10	10	10	10	10	10	10
1,2,3,4,6,7,8-Heptachloro[$^{13}C_{12}$]dibenzo-p-dioxin		10	10	10	10	10	10	10
Octachloro[$^{13}C_{12}$]dibenzo-p-dioxin		20	20	20	20	20	20	20
2,3,7,8-Tetrachloro[$^{13}C_{12}$]dibenzofuran		10	10	10	10	10	10	10
1,2,3,7,8-Pentachloro[$^{13}C_{12}$]dibenzofuran		10	10	10	10	10	10	10
2,3,4,7,8-Pentachloro[$^{13}C_{12}$]dibenzofuran		10	10	10	10	10	10	10
1,2,3,4,7,8-Hexachloro[$^{13}C_{12}$]dibenzofuran		10	10	10	10	10	10	10
1,2,3,6,7,8-Hexachloro[$^{13}C_{12}$]dibenzofuran		10	10	10	10	10	10	10
1,2,3,7,8,9-Hexachloro[$^{13}C_{12}$]dibenzofuran		10	10	10	10	10	10	10
2,3,4,6,7,8-Hexachloro[$^{13}C_{12}$]dibenzofuran		10	10	10	10	10	10	10
1,2,3,4,6,7,8-Heptachloro[$^{13}C_{12}$]dibenzofuran		10	10	10	10	10	10	10
1,2,3,4,7,8,9-Heptachloro[$^{13}C_{12}$]dibenzofuran		10	10	10	10	10	10	10
Octachloro[$^{13}C_{12}$]dibenzofuran		20	20	20	20	20	20	20
Sampling and Syringe Spikes								
* 1,2,3,4-Tetrachloro[$^{13}C_{12}$]dibenzo-p-dioxin		10	10	10	10	10	10	10
** 1,3,7,8-Tetrachloro[$^{13}C_{12}$]dibenzo-p-dioxin		10	10	10	10	10	10	10
** 1,2,4,7,8-Pentachloro[$^{13}C_{12}$]dibenzo-p-dioxin		10	10	10	10	10	10	10
** 1,2,3,4,6,8-Hexachloro[$^{13}C_{12}$]dibenzo-p-dioxin		10	10	10	10	10	10	10
** 1,2,3,4,6,7,9-Heptachloro[$^{13}C_{12}$]dibenzo-p-dioxin		10	10	10	10	10	10	10
Mass-Labelled PCB Congeners								
Surrogate/Extraction Spikes	***IUPAC***							
3,3',4,4'-Tetrachloro[$^{13}C_{12}$]biphenyl	*77L*	10	10	10	10	10	10	10
3,4,4',5-Tetrachloro[$^{13}C_{12}$]biphenyl	*81L*	10	10	10	10	10	10	10
2,3,3',4,4'-Pentachloro[$^{13}C_{12}$]biphenyl	*105L*	10	10	10	10	10	10	10
2,3,4,4',5-Pentachloro[$^{13}C_{12}$]biphenyl	*114L*	10	10	10	10	10	10	10
2,3',4,4',5-Pentachloro[$^{13}C_{12}$]biphenyl	*118L*	10	10	10	10	10	10	10
2',3,4,4',5-Pentachloro[$^{13}C_{12}$]biphenyl	*123L*	10	10	10	10	10	10	10
3,3',4,4',5-Pentachloro[$^{13}C_{12}$]biphenyl	*126L*	10	10	10	10	10	10	10
2,3,3',4,4',5-Hexachloro[$^{13}C_{12}$]biphenyl	*156L*	10	10	10	10	10	10	10
2,3,3',4,4',5'-Hexachloro[$^{13}C_{12}$]biphenyl	*157L*	10	10	10	10	10	10	10
2,3',4,4',5,5'-Hexachloro[$^{13}C_{12}$]biphenyl	*167L*	10	10	10	10	10	10	10
3,3',4,4',5,5'-Hexachloro[$^{13}C_{12}$]biphenyl	*169L*	10	10	10	10	10	10	10
2,2',3,3',4,4',5-Heptachloro[$^{13}C_{12}$]biphenyl	*170L*	10	10	10	10	10	10	10
2,2',3,4,4',5,5'-Heptachloro[$^{13}C_{12}$]biphenyl	*180L*	10	10	10	10	10	10	10
2,3,3',4,4',5,5'-Heptachloro[$^{13}C_{12}$]biphenyl	*189L*	10	10	10	10	10	10	10
Sampling and Syringe Spikes								
* 3,3',4,5'-Tetrachloro[$^{13}C_{12}$]biphenyl	*79L*	10	10	10	10	10	10	10
** 2,3',4',5-Tetrachloro[$^{13}C_{12}$]biphenyl	*70L*	10	10	10	10	10	10	10
** 2,3,3',5,5'-Pentachloro[$^{13}C_{12}$]biphenyl	*111L*	10	10	10	10	10	10	10
** 2,2',3,4,4',5'-Hexachloro[$^{13}C_{12}$]biphenyl	*138L*	10	10	10	10	10	10	10
** 2,2',3,3',5,5',6-Heptachloro[$^{13}C_{12}$]biphenyl	*178L*	10	10	10	10	10	10	10

* for sampling spike
** for syringe spike

DFP-CVS-B1

Catalogue Number	Product (nonane solution)	Qty/Conc
確 DFP-CVS-B1	CS2-L/CS3-L/CS4-L/CS5-L/CS6-L	1Kit (5×200 µl ampoules)
確 DFP-B1-CS2-L	CS2-L	200 µl
確 DFP-B1-CS3-L	CS3-L	200 µl
確 DFP-B1-CS4-L	CS4-L	200 µl
確 DFP-B1-CS5-L	CS5-L	200 µl
確 DFP-B1-CS6-L	CS6-L	200 µl

Native PCDDs & PCDFs		CS2-L (ng/ml)	CS3-L (ng/ml)	CS4-L (ng/ml)	CS5-L (ng/ml)	CS6-L (ng/ml)
1,3,6,8-Tetrachlorodibenzo-p-dioxin		0.05	0.2	1	5	20
1,2,8,9-Tetrachlorodibenzo-p-dioxin		0.05	0.2	1	5	20
2,3,7,8-Tetrachlorodibenzo-p-dioxin		0.05	0.2	1	5	20
1,2,3,7,8-Pentachlorodibenzo-p-dioxin		0.05	0.2	1	5	20
1,2,3,4,7,8-Hexachlorodibenzo-p-dioxin		0.1	0.4	2	10	40
1,2,3,6,7,8-Hexachlorodibenzo-p-dioxin		0.1	0.4	2	10	40
1,2,3,7,8,9-Hexachlorodibenzo-p-dioxin		0.1	0.4	2	10	40
1,2,3,4,6,7,8-Heptachlorodibenzo-p-dioxin		0.1	0.4	2	10	40
Octachlorodibenzo-p-dioxin		0.25	1	5	25	100
1,3,6,8-Tetrachlorodibenzofuran		0.05	0.2	1	5	20
1,2,8,9-Tetrachlorodibenzofuran		0.05	0.2	1	5	20
2,3,7,8-Tetrachlorodibenzofuran		0.05	0.2	1	5	20
1,2,3,7,8-Pentachlorodibenzofuran		0.05	0.2	1	5	20
2,3,4,7,8-Pentachlorodibenzofuran		0.05	0.2	1	5	20
1,2,3,4,7,8-Hexachlorodibenzofuran		0.1	0.4	2	10	40
1,2,3,6,7,8-Hexachlorodibenzofuran		0.1	0.4	2	10	40
1,2,3,7,8,9-Hexachlorodibenzofuran		0.1	0.4	2	10	40
2,3,4,6,7,8-Hexachlorodibenzofuran		0.1	0.4	2	10	40
1,2,3,4,6,7,8-Heptachlorodibenzofuran		0.1	0.4	2	10	40
1,2,3,4,7,8,9-Heptachlorodibenzofuran		0.1	0.4	2	10	40
Octachlorodibenzofuran		0.25	1	5	25	100
Native PCB Congeners	***IUPAC***					
3,3',4,4'-Tetrachlorobiphenyl	*77*	0.1	0.4	2	10	40
3,4,4',5-Tetrachlorobiphenyl	*81*	0.1	0.4	2	10	40
2,3,3',4,4'-Pentachlorobiphenyl	*105*	0.1	0.4	2	10	40
2,3,4,4',5-Pentachlorobiphenyl	*114*	0.1	0.4	2	10	40
2,3',4,4',5-Pentachlorobiphenyl	*118*	0.1	0.4	2	10	40
2',3,4,4',5-Pentachlorobiphenyl	*123*	0.1	0.4	2	10	40
3,3',4,4',5-Pentachlorobiphenyl	*126*	0.1	0.4	2	10	40
2,3,3',4,4',5-Hexachlorobiphenyl	*156*	0.1	0.4	2	10	40
2,3,3',4,4',5'-Hexachlorobiphenyl	*157*	0.1	0.4	2	10	40
2,3',4,4',5,5'-Hexachlorobiphenyl	*167*	0.1	0.4	2	10	40
3,3',4,4',5,5'-Hexachlorobiphenyl	*169*	0.1	0.4	2	10	40
2,2',3,3',4,4',5-Heptachlorobiphenyl	*170*	0.1	0.4	2	10	40
2,2',3,4,4',5,5'-Heptachlorobiphenyl	*180*	0.1	0.4	2	10	40
2,3,3',4,4',5,5'-Heptachlorobiphenyl	*189*	0.1	0.4	2	10	40

Continued on next page

確 第一種特定化学物質

Mass-Labelled PCDDs & PCDFs		CS2-L (ng/ml)	CS3-L (ng/ml)	CS4-L (ng/ml)	CS5-L (ng/ml)	CS6-L (ng/ml)
Surrogate/Extraction Spikes						
1,3,6,8-Tetrachloro[$^{13}C_{12}$]dibenzo-p-dioxin		1	1	1	1	1
2,3,7,8-Tetrachloro[$^{13}C_{12}$]dibenzo-p-dioxin		1	1	1	1	1
1,2,3,7,8-Pentachloro[$^{13}C_{12}$]dibenzo-p-dioxin		1	1	1	1	1
1,2,3,4,7,8-Hexachloro[$^{13}C_{12}$]dibenzo-p-dioxin		1	1	1	1	1
1,2,3,6,7,8-Hexachloro[$^{13}C_{12}$]dibenzo-p-dioxin		1	1	1	1	1
1,2,3,7,8,9-Hexachloro[$^{13}C_{12}$]dibenzo-p-dioxin		1	1	1	1	1
1,2,3,4,6,7,8-Heptachloro[$^{13}C_{12}$]dibenzo-p-dioxin		1	1	1	1	1
Octachloro[$^{13}C_{12}$]dibenzo-p-dioxin		2	2	2	2	2
2,3,7,8-Tetrachloro[$^{13}C_{12}$]dibenzofuran		1	1	1	1	1
1,2,3,7,8-Pentachloro[$^{13}C_{12}$]dibenzofuran		1	1	1	1	1
2,3,4,7,8-Pentachloro[$^{13}C_{12}$]dibenzofuran		1	1	1	1	1
1,2,3,4,7,8-Hexachloro[$^{13}C_{12}$]dibenzofuran		1	1	1	1	1
1,2,3,6,7,8-Hexachloro[$^{13}C_{12}$]dibenzofuran		1	1	1	1	1
1,2,3,7,8,9-Hexachloro[$^{13}C_{12}$]dibenzofuran		1	1	1	1	1
2,3,4,6,7,8-Hexachloro[$^{13}C_{12}$]dibenzofuran		1	1	1	1	1
1,2,3,4,6,7,8-Heptachloro[$^{13}C_{12}$]dibenzofuran		1	1	1	1	1
1,2,3,4,7,8,9-Heptachloro[$^{13}C_{12}$]dibenzofuran		1	1	1	1	1
Octachloro[$^{13}C_{12}$]dibenzofuran		2	2	2	2	2
Sampling and Syringe Spikes						
*1,2,3,4-Tetrachloro[$^{13}C_{12}$]dibenzo-p-dioxin		1	1	1	1	1
** 1,3,7,8-Tetrachloro[$^{13}C_{12}$]dibenzo-p-dioxin		1	1	1	1	1
** 1,2,4,7,8-Pentachloro[$^{13}C_{12}$]dibenzo-p-dioxin		1	1	1	1	1
** 1,2,3,4,6,8-Hexachloro[$^{13}C_{12}$]dibenzo-p-dioxin		1	1	1	1	1
** 1,2,3,4,6,7,9-Heptachloro[$^{13}C_{12}$]dibenzo-p-dioxin		1	1	1	1	1
Mass-Labelled PCB Congeners						
Surrogate/Extraction Spikes	***IUPAC***					
3,3',4,4'-Tetrahloro[$^{13}C_{12}$]biphenyl	*77L*	1	1	1	1	1
3,4,4',5-Tetrachloro[$^{13}C_{12}$]biphenyl	*81L*	1	1	1	1	1
2,3,3',4,4'-Pentachloro[$^{13}C_{12}$]biphenyl	*105L*	1	1	1	1	1
2,3,4,4',5-Pentachloro[$^{13}C_{12}$]biphenyl	*114L*	1	1	1	1	1
2,3',4,4',5-Pentahloro[$^{13}C_{12}$]biphenyl	*118L*	1	1	1	1	1
2',3,4,4',5-Pentachloro[$^{13}C_{12}$]biphenyl	*123L*	1	1	1	1	1
3,3',4,4',5-Pentachloro[$^{13}C_{12}$]biphenyl	*126L*	1	1	1	1	1
2,3,3',4,4',5-Hexachloro[$^{13}C_{12}$]biphenyl	*156L*	1	1	1	1	1
2,3,3',4,4',5'-Hexachloro[$^{13}C_{12}$]biphenyl	*157L*	1	1	1	1	1
2,3',4,4',5,5'-Hexachloro[$^{13}C_{12}$]biphenyl	*167L*	1	1	1	1	1
3,3',4,4',5,5'-Hexachloro[$^{13}C_{12}$]biphenyl	*169L*	1	1	1	1	1
2,2',3,3',4,4',5-Heptachloro[$^{13}C_{12}$]biphenyl	*170L*	1	1	1	1	1
2,2',3,4,4',5,5'-Heptachloro[$^{13}C_{12}$]biphenyl	*180L*	1	1	1	1	1
2,3,3',4,4',5,5'-Heptachloro[$^{13}C_{12}$]biphenyl	*189L*	1	1	1	1	1
Sampling and Syringe Spikes						
* 3,3',4,5'-Tetrachloro[$^{13}C_{12}$]biphenyl	*79L*	1	1	1	1	1
** 2,3',4',5-Tetrahloro[$^{13}C_{12}$]biphenyl	*70L*	1	1	1	1	1
** 2,3,3',5,5'-Pentachloro[$^{13}C_{12}$]biphenyl	*111L*	1	1	1	1	1
** 2,2',3,4,4',5'-Hexachloro[$^{13}C_{12}$]biphenyl	*138L*	1	1	1	1	1
** 2,2',3,3',5,5',6-Heptachloro[$^{13}C_{12}$]biphenyl	*178L*	1	1	1	1	1

* for sampling spike
** for syringe spike

DF-CVS-A10

Catalogue Number	Product (nonane solution)	Qty/Conc
DF-CVS-A10-Set 1	CS1/CS3/CS5/CS7/CS9	1Kit (5×200 µl ampoules)
DF-CVS-A10-Set 2	CS2/CS4/CS6/CS8/CS10	1Kit (5×200 µl ampoules)
DF-CVS-A10-Set 3	CS3/CS5/CS7/CS9/CS11	1Kit (5×200 µl ampoules)
DF-A10-CSL	CSL Extended Calibration/Low Level	200 µl
DF-A10-CS1	CS1	200 µl
DF-A10-CS2	CS2	200 µl
DF-A10-CS3	CS3	200 µl
DF-A10-CS4	CS4	200 µl

Native PCDDs & PCDFs	CSL (ng/ml)	CS1 (ng/ml)	CS2 (ng/ml)	CS3 (ng/ml)	CS4 (ng/ml)
1,3,6,8-Tetrachlorodibenzo-p-dioxin	0.05	0.1	0.2	0.5	1
1,3,7,9-Tetrachlorodibenzo-p-dioxin	0.05	0.1	0.2	0.5	1
1,2,8,9-Tetrachlorodibenzo-p-dioxin	0.05	0.1	0.2	0.5	1
2,3,7,8-Tetrachlorodibenzo-p-dioxin	0.05	0.1	0.2	0.5	1
1,2,3,7,8-Pentachlorodibenzo-p-dioxin	0.05	0.1	0.2	0.5	1
1,2,3,4,7,8-Hexachlorodibenzo-p-dioxin	0.05	0.1	0.2	0.5	1
1,2,3,6,7,8-Hexachlorodibenzo-p-dioxin	0.05	0.1	0.2	0.5	1
1,2,3,7,8,9-Hexachlorodibenzo-p-dioxin	0.05	0.1	0.2	0.5	1
1,2,3,4,6,7,8-Heptachlorodibenzo-p-dioxin	0.05	0.1	0.2	0.5	1
Octachlorodibenzo-p-dioxin	0.1	0.2	0.4	1	2
1,3,6,8-Tetrachlorodibenzofuran	0.05	0.1	0.2	0.5	1
1,2,7,8-Tetrachlorodibenzofuran	0.05	0.1	0.2	0.5	1
1,2,8,9-Tetrachlorodibenzofuran	0.05	0.1	0.2	0.5	1
2,3,7,8-Tetrachlorodibenzofuran	0.05	0.1	0.2	0.5	1
1,2,3,7,8-Pentachlorodibenzofuran	0.05	0.1	0.2	0.5	1
2,3,4,7,8-Pentachlorodibenzofuran	0.05	0.1	0.2	0.5	1
1,2,3,4,7,8-Hexachlorodibenzofuran	0.05	0.1	0.2	0.5	1
1,2,3,6,7,8-Hexachlorodibenzofuran	0.05	0.1	0.2	0.5	1
1,2,3,7,8,9-Hexachlorodibenzofuran	0.05	0.1	0.2	0.5	1
2,3,4,6,7,8-Hexachlorodibenzofuran	0.05	0.1	0.2	0.5	1
1,2,3,4,6,7,8-Heptachlorodibenzofuran	0.05	0.1	0.2	0.5	1
1,2,3,4,7,8,9-Heptachlorodibenzofuran	0.05	0.1	0.2	0.5	1
Octachlorodibenzofuran	0.1	0.2	0.4	1	2
MASS-LABELLED PCDDs & PCDFs					
1,3,6,8-Tetrachloro[$^{13}C_{12}$]dibenzo-p-dioxin	10	10	10	10	10
1,2,3,4-Tetrachloro[$^{13}C_{12}$]dibenzo-p-dioxin	10	10	10	10	10
2,3,7,8-Tetrachloro[$^{13}C_{12}$]dibenzo-p-dioxin	10	10	10	10	10
1,2,3,7,8-Pentachloro[$^{13}C_{12}$]dibenzo-p-dioxin	10	10	10	10	10
1,2,3,4,7,8-Hexachloro[$^{13}C_{12}$]dibenzo-p-dioxin	10	10	10	10	10
1,2,3,6,7,8-Hexachloro[$^{13}C_{12}$]dibenzo-p-dioxin	10	10	10	10	10
1,2,3,7,8,9-Hexachloro[$^{13}C_{12}$]dibenzo-p-dioxin	10	10	10	10	10
1,2,3,4,6,7,8-Heptachloro[$^{13}C_{12}$]dibenzo-p-dioxin	10	10	10	10	10
Octachloro[$^{13}C_{12}$]dibenzo-p-dioxin	20	20	20	20	20
1,3,6,8-Tetrachloro[$^{13}C_{12}$]dibenzofuran	10	10	10	10	10
1,2,3,4-Tetrachloro[$^{13}C_{12}$]dibenzofuran	10	10	10	10	10
1,2,7,8-Tetrachloro[$^{13}C_{12}$]dibenzofuran	10	10	10	10	10
2,3,7,8-Tetrachloro[$^{13}C_{12}$]dibenzofuran	10	10	10	10	10
1,2,3,4,6-Pentachloro[$^{13}C_{12}$]dibenzofuran	10	10	10	10	10
1,2,3,7,8-Pentachloro[$^{13}C_{12}$]dibenzofuran	10	10	10	10	10
2,3,4,7,8-Pentachloro[$^{13}C_{12}$]dibenzofuran	10	10	10	10	10
1,2,3,4,6,9-Hexachloro[$^{13}C_{12}$]dibenzofuran	10	10	10	10	10
1,2,3,4,7,8-Hexachloro[$^{13}C_{12}$]dibenzofuran	10	10	10	10	10
1,2,3,6,7,8-Hexachloro[$^{13}C_{12}$]dibenzofuran	10	10	10	10	10
1,2,3,7,8,9-Hexachloro[$^{13}C_{12}$]dibenzofuran	10	10	10	10	10
2,3,4,6,7,8-Hexachloro[$^{13}C_{12}$]dibenzofuran	10	10	10	10	10
1,2,3,4,6,8,9-Heptachloro[$^{13}C_{12}$]dibenzofuran	10	10	10	10	10
1,2,3,4,6,7,8-Heptachloro[$^{13}C_{12}$]dibenzofuran	10	10	10	10	10
1,2,3,4,7,8,9-Heptachloro[$^{13}C_{12}$]dibenzofuran	10	10	10	10	10
Octachloro[$^{13}C_{12}$]dibenzo-p-dioxin	20	20	20	20	20

Catalogue Number	Product (nonane solution)	Qty/Conc
DF-A10-CS5	CS5	200 µl
DF-A10-CS6	CS6	200 µl
DF-A10-CS7	CS7	200 µl
DF-A10-CS8	CS8	200 µl
DF-A10-CS9	CS9	200 µl
DF-A10-CS10	CS10	200 µl
DF-A10-CS11	CS11	200 µl
DF-A10-CSH	CSH Extended Calibration/High Level	200 µl

CS5 (ng/ml)	CS6 (ng/ml)	CS7 (ng/ml)	CS8 (ng/ml)	CS9 (ng/ml)	CS10 (ng/ml)	CS11 (ng/ml)	CSH (ng/ml)
2	5	10	20	50	100	200	1000
2	5	10	20	50	100	200	1000
2	5	10	20	50	100	200	1000
2	5	10	20	50	100	200	1000
2	5	10	20	50	100	200	1000
2	5	10	20	50	100	200	1000
2	5	10	20	50	100	200	1000
2	5	10	20	50	100	200	1000
2	5	10	20	50	100	200	1000
4	10	20	40	100	200	400	2000
2	5	10	20	50	100	200	1000
2	5	10	20	50	100	200	1000
2	5	10	20	50	100	200	1000
2	5	10	20	50	100	200	1000
2	5	10	20	50	100	200	1000
2	5	10	20	50	100	200	1000
2	5	10	20	50	100	200	1000
2	5	10	20	50	100	200	1000
2	5	10	20	50	100	200	1000
2	5	10	20	50	100	200	1000
2	5	10	20	50	100	200	1000
2	5	10	20	50	100	200	1000
4	10	20	40	100	200	400	2000
10	10	10	10	10	10	10	10
10	10	10	10	10	10	10	10
10	10	10	10	10	10	10	10
10	10	10	10	10	10	10	10
10	10	10	10	10	10	10	10
10	10	10	10	10	10	10	10
10	10	10	10	10	10	10	10
10	10	10	10	10	10	10	10
20	20	20	20	20	20	20	20
10	10	10	10	10	10	10	10
10	10	10	10	10	10	10	10
10	10	10	10	10	10	10	10
10	10	10	10	10	10	10	10
10	10	10	10	10	10	10	10
10	10	10	10	10	10	10	10
10	10	10	10	10	10	10	10
10	10	10	10	10	10	10	10
10	10	10	10	10	10	10	10
10	10	10	10	10	10	10	10
10	10	10	10	10	10	10	10
10	10	10	10	10	10	10	10
10	10	10	10	10	10	10	10
10	10	10	10	10	10	10	10
10	10	10	10	10	10	10	10
20	20	20	20	20	20	20	20

DF-CVS-A5

Catalogue Number	Product (nonane solution)	Qty/Conc
DF-CVS-A5-Set 1	CS1/CS3/CS5/CS7/CS9	1Kit (5×200 µl ampoules)
DF-CVS-A5-Set 2	CS2/CS4/CS6/CS8/CS10	1Kit (5×200 µl ampoules)
DF-A5-CSL	CSL Extended Calibration/Low Level	200 µl
DF-A5-CS1	CS1	200 µl
DF-A5-CS2	CS2	200 µl
DF-A5-CS3	CS3	200 µl

Native PCDDs & PCDFs	CSL (ng/ml)	CS1 (ng/ml)	CS2 (ng/ml)	CS3 (ng/ml)
1,3,6,8-Tetrachlorodibenzo-p-dioxin	0.05	0.1	0.2	0.5
1,3,7,9-Tetrachlorodibenzo-p-dioxin	0.05	0.1	0.2	0.5
1,2,8,9-Tetrachlorodibenzo-p-dioxin	0.05	0.1	0.2	0.5
2,3,7,8-Tetrachlorodibenzo-p-dioxin	0.05	0.1	0.2	0.5
1,2,3,7,8-Pentachlorodibenzo-p-dioxin	0.05	0.1	0.2	0.5
1,2,3,4,7,8-Hexachlorodibenzo-p-dioxin	0.05	0.1	0.2	0.5
1,2,3,6,7,8-Hexachlorodibenzo-p-dioxin	0.05	0.1	0.2	0.5
1,2,3,7,8,9-Hexachlorodibenzo-p-dioxin	0.05	0.1	0.2	0.5
1,2,3,4,6,7,8-Heptachlorodibenzo-p-dioxin	0.05	0.1	0.2	0.5
Octachlorodibenzo-p-dioxin	0.1	0.2	0.4	1
1,3,6,8-Tetrachlorodibenzofuran	0.05	0.1	0.2	0.5
1,2,7,8-Tetrachlorodibenzofuran	0.05	0.1	0.2	0.5
1,2,8,9-Tetrachlorodibenzofuran	0.05	0.1	0.2	0.5
2,3,7,8-Tetrachlorodibenzofuran	0.05	0.1	0.2	0.5
1,2,3,7,8-Pentachlorodibenzofuran	0.05	0.1	0.2	0.5
2,3,4,7,8-Pentachlorodibenzofuran	0.05	0.1	0.2	0.5
1,2,3,4,7,8-Hexachlorodibenzofuran	0.05	0.1	0.2	0.5
1,2,3,6,7,8-Hexachlorodibenzofuran	0.05	0.1	0.2	0.5
1,2,3,7,8,9-Hexachlorodibenzofuran	0.05	0.1	0.2	0.5
2,3,4,6,7,8-Hexachlorodibenzofuran	0.05	0.1	0.2	0.5
1,2,3,4,6,7,8-Heptachlorodibenzofuran	0.05	0.1	0.2	0.5
1,2,3,4,7,8,9-Heptachlorodibenzofuran	0.05	0.1	0.2	0.5
Octachlorodibenzofuran	0.1	0.2	0.4	1
MASS-LABELLED PCDDs & PCDFs				
1,3,6,8-Tetrachloro[$^{13}C_{12}$]dibenzo-p-dioxin	5	5	5	5
1,2,3,4-Tetrachloro[$^{13}C_{12}$]dibenzo-p-dioxin	5	5	5	5
2,3,7,8-Tetrachloro[$^{13}C_{12}$]dibenzo-p-dioxin	5	5	5	5
1,2,3,7,8-Pentachloro[$^{13}C_{12}$]dibenzo-p-dioxin	5	5	5	5
1,2,3,4,7,8-Hexachloro[$^{13}C_{12}$]dibenzo-p-dioxin	5	5	5	5
1,2,3,6,7,8-Hexachloro[$^{13}C_{12}$]dibenzo-p-dioxin	5	5	5	5
1,2,3,7,8,9-Hexachloro[$^{13}C_{12}$]dibenzo-p-dioxin	5	5	5	5
1,2,3,4,6,7,8-Heptachloro[$^{13}C_{12}$]dibenzo-p-dioxin	5	5	5	5
Octachloro[$^{13}C_{12}$]dibenzo-p-dioxin	10	10	10	10
1,3,6,8-Tetrachloro[$^{13}C_{12}$]dibenzofuran	5	5	5	5
1,2,3,4-Tetrachloro[$^{13}C_{12}$]dibenzofuran	5	5	5	5
1,2,7,8-Tetrachloro[$^{13}C_{12}$]dibenzofuran	5	5	5	5
2,3,7,8-Tetrachloro[$^{13}C_{12}$]dibenzofuran	5	5	5	5
1,2,3,4,6-Pentachloro[$^{13}C_{12}$]dibenzofuran	5	5	5	5
1,2,3,7,8-Pentachloro[$^{13}C_{12}$]dibenzofuran	5	5	5	5
2,3,4,7,8-Pentachloro[$^{13}C_{12}$]dibenzofuran	5	5	5	5
1,2,3,4,6,9-Hexachloro[$^{13}C_{12}$]dibenzofuran	5	5	5	5
1,2,3,4,7,8-Hexachloro[$^{13}C_{12}$]dibenzofuran	5	5	5	5
1,2,3,6,7,8-Hexachloro[$^{13}C_{12}$]dibenzofuran	5	5	5	5
1,2,3,7,8,9-Hexachloro[$^{13}C_{12}$]dibenzofuran	5	5	5	5
2,3,4,6,7,8-Hexachloro[$^{13}C_{12}$]dibenzofuran	5	5	5	5
1,2,3,4,6,8,9-Heptachloro[$^{13}C_{12}$]dibenzofuran	5	5	5	5
1,2,3,4,6,7,8-Heptachloro[$^{13}C_{12}$]dibenzofuran	5	5	5	5
1,2,3,4,7,8,9-Heptachloro[$^{13}C_{12}$]dibenzofuran	5	5	5	5
Octachloro[$^{13}C_{12}$]dibenzo-p-dioxin	10	10	10	10

Catalogue Number	Product (nonane solution)		Qty/Conc
DF-A5-CS4	CS4		200 µl
DF-A5-CS5	CS5		200 µl
DF-A5-CS6	CS6		200 µl
DF-A5-CS7	CS7		200 µl
DF-A5-CS8	CS8		200 µl
DF-A5-CS9	CS9		200 µl
DF-A5-CS10	CS10		200 µl
DF-A5-CSH	CSH	Extended Calibration/High Level	200 µl

CS4 (ng/ml)	CS5 (ng/ml)	CS6 (ng/ml)	CS7 (ng/ml)	CS8 (ng/ml)	CS9 (ng/ml)	CS10 (ng/ml)	CSH (ng/ml)
1	2	5	10	20	50	100	1000
1	2	5	10	20	50	100	1000
1	2	5	10	20	50	100	1000
1	2	5	10	20	50	100	1000
1	2	5	10	20	50	100	1000
1	2	5	10	20	50	100	1000
1	2	5	10	20	50	100	1000
1	2	5	10	20	50	100	1000
1	2	5	10	20	50	100	1000
2	4	10	20	40	100	200	2000
1	2	5	10	20	50	100	1000
1	2	5	10	20	50	100	1000
1	2	5	10	20	50	100	1000
1	2	5	10	20	50	100	1000
1	2	5	10	20	50	100	1000
1	2	5	10	20	50	100	1000
1	2	5	10	20	50	100	1000
1	2	5	10	20	50	100	1000
1	2	5	10	20	50	100	1000
1	2	5	10	20	50	100	1000
1	2	5	10	20	50	100	1000
1	2	5	10	20	50	100	1000
2	4	10	20	40	100	200	2000
5	5	5	5	5	5	5	5
5	5	5	5	5	5	5	5
5	5	5	5	5	5	5	5
5	5	5	5	5	5	5	5
5	5	5	5	5	5	5	5
5	5	5	5	5	5	5	5
5	5	5	5	5	5	5	5
5	5	5	5	5	5	5	5
10	10	10	10	10	10	10	10
5	5	5	5	5	5	5	5
5	5	5	5	5	5	5	5
5	5	5	5	5	5	5	5
5	5	5	5	5	5	5	5
5	5	5	5	5	5	5	5
5	5	5	5	5	5	5	5
5	5	5	5	5	5	5	5
5	5	5	5	5	5	5	5
5	5	5	5	5	5	5	5
5	5	5	5	5	5	5	5
5	5	5	5	5	5	5	5
5	5	5	5	5	5	5	5
5	5	5	5	5	5	5	5
5	5	5	5	5	5	5	5
5	5	5	5	5	5	5	5
10	10	10	10	10	10	10	10

DF-CVS-B10

Catalogue Number	Product (nonane solution)	Qty/Conc
DF-CVS-B10-Set 1	CS1/CS3/CS5/CS7/CS9	1Kit (5×200 µl ampoules)
DF-CVS-B10-Set 2	CS2/CS4/CS6/CS8/CS10	1Kit (5×200 µl ampoules)
DF-CVS-B10-Set 3	CS3/CS5/CS7/CS9/CS11	1Kit (5×200 µl ampoules)
DF-B10-CS1	CS1	200 µl
DF-B10-CS2	CS2	200 µl
DF-B10-CS3	CS3	200 µl
DF-B10-CS4	CS4	200 µl

Native PCDDs & PCDFs	**CS1** (ng/ml)	**CS2** (ng/ml)	**CS3** (ng/ml)	**CS4** (ng/ml)
1,3,6,8-Tetrachlorodibenzo-p-dioxin	0.1	0.2	0.5	1
1,3,7,9-Tetrachlorodibenzo-p-dioxin	0.1	0.2	0.5	1
1,2,8,9-Tetrachlorodibenzo-p-dioxin	0.1	0.2	0.5	1
2,3,7,8-Tetrachlorodibenzo-p-dioxin	0.1	0.2	0.5	1
1,2,3,7,8-Pentachlorodibenzo-p-dioxin	0.1	0.2	0.5	1
1,2,3,4,7,8-Hexachlorodibenzo-p-dioxin	0.2	0.4	1	2
1,2,3,6,7,8-Hexachlorodibenzo-p-dioxin	0.2	0.4	1	2
1,2,3,7,8,9-Hexachlorodibenzo-p-dioxin	0.2	0.4	1	2
1,2,3,4,6,7,8-Heptachlorodibenzo-p-dioxin	0.2	0.4	1	2
Octachlorodibenzo-p-dioxin	0.5	1	2.5	5
1,3,6,8-Tetrachlorodibenzofuran	0.1	0.2	0.5	1
1,2,7,8-Tetrachlorodibenzofuran	0.1	0.2	0.5	1
1,2,8,9-Tetrachlorodibenzofuran	0.1	0.2	0.5	1
2,3,7,8-Tetrachlorodibenzofuran	0.1	0.2	0.5	1
1,2,3,7,8-Pentachlorodibenzofuran	0.1	0.2	0.5	1
2,3,4,7,8-Pentachlorodibenzofuran	0.1	0.2	0.5	1
1,2,3,4,7,8-Hexachlorodibenzofuran	0.2	0.4	1	2
1,2,3,6,7,8-Hexachlorodibenzofuran	0.2	0.4	1	2
1,2,3,7,8,9-Hexachlorodibenzofuran	0.2	0.4	1	2
2,3,4,6,7,8-Hexachlorodibenzofuran	0.2	0.4	1	2
1,2,3,4,6,7,8-Heptachlorodibenzofuran	0.2	0.4	1	2
1,2,3,4,7,8,9-Heptachlorodibenzofuran	0.2	0.4	1	2
Octachlorodibenzofuran	0.5	1	2.5	5
MASS-LABELLED PCDDs & PCDFs				
1,3,6,8-Tetrachloro[$^{13}C_{12}$]dibenzo-p-dioxin	10	10	10	10
1,2,3,4-Tetrachloro[$^{13}C_{12}$]dibenzo-p-dioxin	10	10	10	10
2,3,7,8-Tetrachloro[$^{13}C_{12}$]dibenzo-p-dioxin	10	10	10	10
1,2,3,7,8-Pentachloro[$^{13}C_{12}$]dibenzo-p-dioxin	10	10	10	10
1,2,3,4,7,8-Hexachloro[$^{13}C_{12}$]dibenzo-p-dioxin	10	10	10	10
1,2,3,6,7,8-Hexachloro[$^{13}C_{12}$]dibenzo-p-dioxin	10	10	10	10
1,2,3,7,8,9-Hexachloro[$^{13}C_{12}$]dibenzo-p-dioxin	10	10	10	10
1,2,3,4,6,7,8-Heptachloro[$^{13}C_{12}$]dibenzo-p-dioxin	10	10	10	10
Octachloro[$^{13}C_{12}$]dibenzo-p-dioxin	20	20	20	20
1,3,6,8-Tetrachloro[$^{13}C_{12}$]dibenzofuran	10	10	10	10
1,2,3,4-Tetrachloro[$^{13}C_{12}$]dibenzofuran	10	10	10	10
1,2,7,8-Tetrachloro[$^{13}C_{12}$]dibenzofuran	10	10	10	10
2,3,7,8-Tetrachloro[$^{13}C_{12}$]dibenzofuran	10	10	10	10
1,2,3,4,6-Pentachloro[$^{13}C_{12}$]dibenzofuran	10	10	10	10
1,2,3,7,8-Pentachloro[$^{13}C_{12}$]dibenzofuran	10	10	10	10
2,3,4,7,8-Pentachloro[$^{13}C_{12}$]dibenzofuran	10	10	10	10
1,2,3,4,6,9-Hexachloro[$^{13}C_{12}$]dibenzofuran	10	10	10	10
1,2,3,4,7,8-Hexachloro[$^{13}C_{12}$]dibenzofuran	10	10	10	10
1,2,3,6,7,8-Hexachloro[$^{13}C_{12}$]dibenzofuran	10	10	10	10
1,2,3,7,8,9-Hexachloro[$^{13}C_{12}$]dibenzofuran	10	10	10	10
2,3,4,6,7,8-Hexachloro[$^{13}C_{12}$]dibenzofuran	10	10	10	10
1,2,3,4,6,8,9-Heptachloro[$^{13}C_{12}$]dibenzofuran	10	10	10	10
1,2,3,4,6,7,8-Heptachloro[$^{13}C_{12}$]dibenzofuran	10	10	10	10
1,2,3,4,7,8,9-Heptachloro[$^{13}C_{12}$]dibenzofuran	10	10	10	10
Octachloro[$^{13}C_{12}$]dibenzo-p-dioxin	20	20	20	20

Catalogue Number	Product (nonane solution)	Qty/Conc
DF-B10-CS5	CS5	200 µl
DF-B10-CS6	CS6	200 µl
DF-B10-CS7	CS7	200 µl
DF-B10-CS8	CS8	200 µl
DF-B10-CS9	CS9	200 µl
DF-B10-CS10	CS10	200 µl
DF-B10-CS11	CS11	200 µl

CS5 (ng/ml)	CS6 (ng/ml)	CS7 (ng/ml)	CS8 (ng/ml)	CS9 (ng/ml)	CS10 (ng/ml)	CS11 (ng/ml)
2	5	10	20	50	100	200
2	5	10	20	50	100	200
2	5	10	20	50	100	200
2	5	10	20	50	100	200
2	5	10	20	50	100	200
4	10	20	40	100	200	400
4	10	20	40	100	200	400
4	10	20	40	100	200	400
4	10	20	40	100	200	400
10	25	50	100	250	500	1000
2	5	10	20	50	100	200
2	5	10	20	50	100	200
2	5	10	20	50	100	200
2	5	10	20	50	100	200
2	5	10	20	50	100	200
2	5	10	20	50	100	200
4	10	20	40	100	200	400
4	10	20	40	100	200	400
4	10	20	40	100	200	400
4	10	20	40	100	200	400
4	10	20	40	100	200	400
4	10	20	40	100	200	400
10	25	50	100	250	500	1000
10	10	10	10	10	10	10
10	10	10	10	10	10	10
10	10	10	10	10	10	10
10	10	10	10	10	10	10
10	10	10	10	10	10	10
10	10	10	10	10	10	10
10	10	10	10	10	10	10
10	10	10	10	10	10	10
20	20	20	20	20	20	20
10	10	10	10	10	10	10
10	10	10	10	10	10	10
10	10	10	10	10	10	10
10	10	10	10	10	10	10
10	10	10	10	10	10	10
10	10	10	10	10	10	10
10	10	10	10	10	10	10
10	10	10	10	10	10	10
10	10	10	10	10	10	10
10	10	10	10	10	10	10
10	10	10	10	10	10	10
10	10	10	10	10	10	10
10	10	10	10	10	10	10
10	10	10	10	10	10	10
20	20	20	20	20	20	20

DF-CVS-C10

Catalogue Number	Product (nonane solution)	Qty/Conc
DF-CVS-C10-Set 1	CS1/CS2/CS3/CS4/CS5	1Kit (5×200 µl ampoules)
DF-CVS-C10-Set 2	CS2/CS3/CS4/CS5/CS6	1Kit (5×200 µl ampoules)
DF-C10-CS1	CS1	200 µl
DF-C10-CS2	CS2	200 µl
DF-C10-CS3	CS3	200 µl
DF-C10-CS4	CS4	200 µl
DF-C10-CS5	CS5	200 µl
DF-C10-CS6	CS6	200 µl
DF-C10-CS7	CS7	200 µl

Native PCDDs & PCDFs	CS1 (ng/ml)	CS2 (ng/ml)	CS3 (ng/ml)	CS4 (ng/ml)	CS5 (ng/ml)	CS6 (ng/ml)	CS7 (ng/ml)
1,3,6,8-Tetrachlorodibenzo-p-dioxin	0.1	0.5	2	10	50	200	500
1,2,8,9-Tetrachlorodibenzo-p-dioxin	0.1	0.5	2	10	50	200	500
2,3,7,8-Tetrachlorodibenzo-p-dioxin	0.1	0.5	2	10	50	200	500
1,2,3,7,8-Pentachlorodibenzo-p-dioxin	0.1	0.5	2	10	50	200	500
1,2,3,4,7,8-Hexachlorodibenzo-p-dioxin	0.2	1	4	20	100	400	1000
1,2,3,6,7,8-Hexachlorodibenzo-p-dioxin	0.2	1	4	20	100	400	1000
1,2,3,7,8,9-Hexachlorodibenzo-p-dioxin	0.2	1	4	20	100	400	1000
1,2,3,4,6,7,8-Heptachlorodibenzo-p-dioxin	0.2	1	4	20	100	400	1000
Octachlorodibenzo-p-dioxin	0.5	2.5	10	50	250	1000	2500
1,3,6,8-Tetrachlorodibenzofuran	0.1	0.5	2	10	50	200	500
1,2,8,9-Tetrachlorodibenzofuran	0.1	0.5	2	10	50	200	500
2,3,7,8-Tetrachlorodibenzofuran	0.1	0.5	2	10	50	200	500
1,2,3,7,8-Pentachlorodibenzofuran	0.1	0.5	2	10	50	200	500
2,3,4,7,8-Pentachlorodibenzofuran	0.1	0.5	2	10	50	200	500
1,2,3,4,7,8-Hexachlorodibenzofuran	0.2	1	4	20	100	400	1000
1,2,3,6,7,8-Hexachlorodibenzofuran	0.2	1	4	20	100	400	1000
1,2,3,7,8,9-Hexachlorodibenzofuran	0.2	1	4	20	100	400	1000
2,3,4,6,7,8-Hexachlorodibenzofuran	0.2	1	4	20	100	400	1000
1,2,3,4,6,7,8-Heptachlorodibenzofuran	0.2	1	4	20	100	400	1000
1,2,3,4,7,8,9-Heptachlorodibenzofuran	0.2	1	4	20	100	400	1000
Octachlorodibenzofuran	0.5	2.5	10	50	250	1000	2500
MASS-LABELLED PCDDs & PCDFs Surrogate/Extraction Spikes							
1,3,6,8-Tetrachloro[$^{13}C_{12}$]dibenzo-p-dioxin	10	10	10	10	10	10	10
2,3,7,8-Tetrachloro[$^{13}C_{12}$]dibenzo-p-dioxin	10	10	10	10	10	10	10
1,2,3,7,8-Pentachloro[$^{13}C_{12}$]dibenzo-p-dioxin	10	10	10	10	10	10	10
1,2,3,4,7,8-Hexachloro[$^{13}C_{12}$]dibenzo-p-dioxin	10	10	10	10	10	10	10
1,2,3,6,7,8-Hexachloro[$^{13}C_{12}$]dibenzo-p-dioxin	10	10	10	10	10	10	10
1,2,3,7,8,9-Hexachloro[$^{13}C_{12}$]dibenzo-p-dioxin	10	10	10	10	10	10	10
1,2,3,4,6,7,8-Heptachloro[$^{13}C_{12}$]dibenzo-p-dioxin	10	10	10	10	10	10	10
Octachloro[$^{13}C_{12}$]dibenzo-p-dioxin	20	20	20	20	20	20	20
2,3,7,8-Tetrachloro[$^{13}C_{12}$]dibenzofuran	10	10	10	10	10	10	10
1,2,3,7,8-Pentachloro[$^{13}C_{12}$]dibenzofuran	10	10	10	10	10	10	10
2,3,4,7,8-Pentachloro[$^{13}C_{12}$]dibenzofuran	10	10	10	10	10	10	10
1,2,3,4,7,8-Hexachloro[$^{13}C_{12}$]dibenzofuran	10	10	10	10	10	10	10
1,2,3,6,7,8-Hexachloro[$^{13}C_{12}$]dibenzofuran	10	10	10	10	10	10	10
1,2,3,7,8,9-Hexachloro[$^{13}C_{12}$]dibenzofuran	10	10	10	10	10	10	10
2,3,4,6,7,8-Hexachloro[$^{13}C_{12}$]dibenzofuran	10	10	10	10	10	10	10
1,2,3,4,6,7,8-Heptachloro[$^{13}C_{12}$]dibenzofuran	10	10	10	10	10	10	10
1,2,3,4,7,8,9-Heptachloro[$^{13}C_{12}$]dibenzofuran	10	10	10	10	10	10	10
Octachloro[$^{13}C_{12}$]dibenzofuran	20	20	20	20	20	20	20
Sampling and Syringe Spikes							
*1,2,3,4-Tetrachloro[$^{13}C_{12}$]dibenzo-p-dioxin	10	10	10	10	10	10	10
**1,3,7,8-Tetrachloro[$^{13}C_{12}$]dibenzo-p-dioxin	10	10	10	10	10	10	10
**1,2,4,7,8-Pentachloro[$^{13}C_{12}$]dibenzo-p-dioxin	10	10	10	10	10	10	10
**1,2,3,4,6,8-Hexachloro[$^{13}C_{12}$]dibenzo-p-dioxin	10	10	10	10	10	10	10
**1,2,3,4,6,7,9-Heptachloro[$^{13}C_{12}$]dibenzo-p-dioxin	10	10	10	10	10	10	10

* for sampling spike
** for syringe spike

DL-PCBs 検量線作成用標準液

Calibration Solutions

DL-PCBs Mixture

PCB-CVS-A10

Catalogue Number	Product (nonane solution)	Qty/Conc
確 PCB-CVS-A10-Set 1	CS1/CS3/CS5/CS7/CS9	1Kit (5×200 µl ampoules)
確 PCB-CVS-A10-Set 2	CS2/CS4/CS6/CS8/CS10	1Kit (5×200 µl ampoules)
確 PCB-CVS-A10-Set 3	CS3/CS5/CS7/CS9/CS11	1Kit (5×200 µl ampoules)
確 PCB-A10-CSL	CSL Extended Calibration/Low Level	200 µl
確 PCB-A10-CS1	CS1	200 µl
確 PCB-A10-CS2	CS2	200 µl
確 PCB-A10-CS3	CS3	200 µl
確 PCB-A10-CS4	CS4	200 µl

NATIVE PCB CONGERNERS	*IUPAC*	CSL (ng/ml)	CS1 (ng/ml)	CS2 (ng/ml)	CS3 (ng/ml)	CS4 (ng/ml)
3,3',4,4'-Tetrachlorobiphenyl	*77*	0.05	0.1	0.2	0.5	1
3,4,4',5-Tetrachlorobiphenyl	*81*	0.05	0.1	0.2	0.5	1
2,3,3',4,4'-Pentachlorobiphenyl	*105*	0.05	0.1	0.2	0.5	1
2,3,4,4',5-Pentachlorobiphenyl	*114*	0.05	0.1	0.2	0.5	1
2,3',4,4',5-Pentachlorobiphenyl	*118*	0.05	0.1	0.2	0.5	1
2',3,4,4',5-Pentachlorobiphenyl	*123*	0.05	0.1	0.2	0.5	1
3,3',4,4',5-Pentachlorobiphenyl	*126*	0.05	0.1	0.2	0.5	1
2,3,3',4,4',5-Hexachlorobiphenyl	*156*	0.05	0.1	0.2	0.5	1
2,3,3',4,4',5'-Hexachlorobiphenyl	*157*	0.05	0.1	0.2	0.5	1
2,3',4,4',5,5'-Hexachlorobiphenyl	*167*	0.05	0.1	0.2	0.5	1
3,3',4,4',5,5'-Hexachlorobiphenyl	*169*	0.05	0.1	0.2	0.5	1
2,2',3,3',4,4',5-Heptachlorobiphenyl	*170*	0.05	0.1	0.2	0.5	1
2,2',3,4,4',5,5'-Heptachlorobiphenyl	*180*	0.05	0.1	0.2	0.5	1
2,3,3',4,4',5,5'-Heptachlorobiphenyl	*189*	0.05	0.1	0.2	0.5	1

MASS-LABELLED PCB CONGERNERS

Sampling and Syringe Spikes

*3,3',4,5'-Tetrachloro[$^{13}C_{12}$]biphenyl	*79L*	10	10	10	10	10
**2,3',4',5-Tetrachloro[$^{13}C_{12}$]biphenyl	*70L*	10	10	10	10	10
**2,3,3',5,5'-Pentachloro[$^{13}C_{12}$]biphenyl	*111L*	10	10	10	10	10
**2,2',3,4,4',5'-Hexachloro[$^{13}C_{12}$]biphenyl	*138L*	10	10	10	10	10

Surrogate/Extraction Spikes

3,3',4,4'-Tetrachloro[$^{13}C_{12}$]biphenyl	*77L*	10	10	10	10	10
3,4,4',5-Tetrachloro[$^{13}C_{12}$]biphenyl	*81L*	10	10	10	10	10
2,3,3',4,4'-Pentachloro[$^{13}C_{12}$]biphenyl	*105L*	10	10	10	10	10
2,3,4,4',5-Pentachloro[$^{13}C_{12}$]biphenyl	*114L*	10	10	10	10	10
2,3',4,4',5-Pentachloro[$^{13}C_{12}$]biphenyl	*118L*	10	10	10	10	10
2',3,4,4',5-Pentachloro[$^{13}C_{12}$]biphenyl	*123L*	10	10	10	10	10
3,3',4,4',5-Pentachloro[$^{13}C_{12}$]biphenyl	*126L*	10	10	10	10	10
2,3,3',4,4',5-Hexachloro[$^{13}C_{12}$]biphenyl	*156L*	10	10	10	10	10
2,3,3',4,4',5'-Hexachloro[$^{13}C_{12}$]biphenyl	*157L*	10	10	10	10	10
2,3',4,4',5,5'-Hexachloro[$^{13}C_{12}$]biphenyl	*167L*	10	10	10	10	10
3,3',4,4',5,5'-Hexachloro[$^{13}C_{12}$]biphenyl	*169L*	10	10	10	10	10
2,2',3,3',4,4',5-Heptachloro[$^{13}C_{12}$]biphenyl	*170L*	10	10	10	10	10
2,2',3,4,4',5,5'-Heptachloro[$^{13}C_{12}$]biphenyl	*180L*	10	10	10	10	10
2,3,3',4,4',5,5'-Heptachloro[$^{13}C_{12}$]biphenyl	*189L*	10	10	10	10	10

* for pre-sampling spike
** for syringe spike / recovery standard

確 第一種特定化学物質

Catalogue Number	Product (nonane solution)	Qty/Conc
確 PCB-A10-CS5	CS5	200 µl
確 PCB-A10-CS6	CS6	200 µl
確 PCB-A10-CS7	CS7	200 µl
確 PCB-A10-CS8	CS8	200 µl
確 PCB-A10-CS9	CS9	200 µl
確 PCB-A10-CS10	CS10	200 µl
確 PCB-A10-CS11	CS11	200 µl
確 PCB-A10-CSH	CSH Extended Calibration/High Level	200 µl

CS5 (ng/ml)	CS6 (ng/ml)	CS7 (ng/ml)	CS8 (ng/ml)	CS9 (ng/ml)	CS10 (ng/ml)	CS11 (ng/ml)	CSH (ng/ml)
2	5	10	20	50	100	250	1000
2	5	10	20	50	100	250	1000
2	5	10	20	50	100	250	1000
2	5	10	20	50	100	250	1000
2	5	10	20	50	100	250	1000
2	5	10	20	50	100	250	1000
2	5	10	20	50	100	250	1000
2	5	10	20	50	100	250	1000
2	5	10	20	50	100	250	1000
2	5	10	20	50	100	250	1000
2	5	10	20	50	100	250	1000
2	5	10	20	50	100	250	1000
2	5	10	20	50	100	250	1000
2	5	10	20	50	100	250	1000
10	10	10	10	10	10	10	10
10	10	10	10	10	10	10	10
10	10	10	10	10	10	10	10
10	10	10	10	10	10	10	10
10	10	10	10	10	10	10	10
10	10	10	10	10	10	10	10
10	10	10	10	10	10	10	10
10	10	10	10	10	10	10	10
10	10	10	10	10	10	10	10
10	10	10	10	10	10	10	10
10	10	10	10	10	10	10	10
10	10	10	10	10	10	10	10
10	10	10	10	10	10	10	10
10	10	10	10	10	10	10	10
10	10	10	10	10	10	10	10
10	10	10	10	10	10	10	10

PCB-CVS-A5

Catalogue Number	Product (nonane solution)	Qty/Conc
確 PCB-CVS-A5-Set 1	CS1/CS3/CS5/CS7/CS9	1Kit (5×200 µl ampoules)
確 PCB-CVS-A5-Set 2	CS2/CS4/CS6/CS8/CS10	1Kit (5×200 µl ampoules)
確 PCB-CVS-A5-Set 3	CS3/CS5/CS7/CS9/CS11	1Kit (5×200 µl ampoules)
確 PCB-A5-CSL	CSL Extended Calibration/Low Level	200 µl
確 PCB-A5-CS1	CS1	200 µl
確 PCB-A5-CS2	CS2	200 µl
確 PCB-A5-CS3	CS3	200 µl
確 PCB-A5-CS4	CS4	200 µl

NATIVE PCB CONGERNERS	*IUPAC*	CSL (ng/ml)	CS1 (ng/ml)	CS2 (ng/ml)	CS3 (ng/ml)	CS4 (ng/ml)
3,3',4,4'-Tetrachlorobiphenyl	*77*	0.05	0.1	0.2	0.5	1
3,4,4',5-Tetrachlorobiphenyl	*81*	0.05	0.1	0.2	0.5	1
2,3,3',4,4'-Pentachlorobiphenyl	*105*	0.05	0.1	0.2	0.5	1
2,3,4,4',5-Pentachlorobiphenyl	*114*	0.05	0.1	0.2	0.5	1
2,3',4,4',5-Pentachlorobiphenyl	*118*	0.05	0.1	0.2	0.5	1
2',3,4,4',5-Pentachlorobiphenyl	*123*	0.05	0.1	0.2	0.5	1
3,3',4,4',5-Pentachlorobiphenyl	*126*	0.05	0.1	0.2	0.5	1
2,3,3',4,4',5-Hexachlorobiphenyl	*156*	0.05	0.1	0.2	0.5	1
2,3,3',4,4',5'-Hexachlorobiphenyl	*157*	0.05	0.1	0.2	0.5	1
2,3',4,4',5,5'-Hexachlorobiphenyl	*167*	0.05	0.1	0.2	0.5	1
3,3',4,4',5,5'-Hexachlorobiphenyl	*169*	0.05	0.1	0.2	0.5	1
2,2',3,3',4,4',5-Heptachlorobiphenyl	*170*	0.05	0.1	0.2	0.5	1
2,2',3,4,4',5,5'-Heptachlorobiphenyl	*180*	0.05	0.1	0.2	0.5	1
2,3,3',4,4',5,5'-Heptachlorobiphenyl	*189*	0.05	0.1	0.2	0.5	1

MASS-LABELLED PCB CONGERNERS

Sampling and Syringe Spikes

*3,3',4,5'-Tetrachloro[$^{13}C_{12}$]biphenyl	*79L*	5	5	5	5	5
**2,3',4',5-Tetrachloro[$^{13}C_{12}$]biphenyl	*70L*	5	5	5	5	5
**2,3,3',5,5'-Pentachloro[$^{13}C_{12}$]biphenyl	*111L*	5	5	5	5	5
**2,2',3,4,4',5'-Hexachloro[$^{13}C_{12}$]biphenyl	*138L*	5	5	5	5	5

Surrogate/Extraction Spikes

3,3',4,4'-Tetrachloro[$^{13}C_{12}$]biphenyl	*77L*	5	5	5	5	5
3,4,4',5-Tetrachloro[$^{13}C_{12}$]biphenyl	*81L*	5	5	5	5	5
2,3,3',4,4'-Pentachloro[$^{13}C_{12}$]biphenyl	*105L*	5	5	5	5	5
2,3,4,4',5-Pentachloro[$^{13}C_{12}$]biphenyl	*114L*	5	5	5	5	5
2,3',4,4',5-Pentachloro[$^{13}C_{12}$]biphenyl	*118L*	5	5	5	5	5
2',3,4,4',5-Pentachloro[$^{13}C_{12}$]biphenyl	*123L*	5	5	5	5	5
3,3',4,4',5-Pentachloro[$^{13}C_{12}$]biphenyl	*126L*	5	5	5	5	5
2,3,3',4,4',5-Hexachloro[$^{13}C_{12}$]biphenyl	*156L*	5	5	5	5	5
2,3,3',4,4',5'-Hexachloro[$^{13}C_{12}$]biphenyl	*157L*	5	5	5	5	5
2,3',4,4',5,5'-Hexachloro[$^{13}C_{12}$]biphenyl	*167L*	5	5	5	5	5
3,3',4,4',5,5'-Hexachloro[$^{13}C_{12}$]biphenyl	*169L*	5	5	5	5	5
2,2',3,3',4,4',5-Heptachloro[$^{13}C_{12}$]biphenyl	*170L*	5	5	5	5	5
2,2',3,4,4',5,5'-Heptachloro[$^{13}C_{12}$]biphenyl	*180L*	5	5	5	5	5
2,3,3',4,4',5,5'-Heptachloro[$^{13}C_{12}$]biphenyl	*189L*	5	5	5	5	5

* for pre-sampling spike
** for syringe spike / recovery standard

確 第一種特定化学物質

Catalogue Number	Product (nonane solution)	Qty/Conc
確 PCB-A5-CS5	CS5	200 µl
確 PCB-A5-CS6	CS6	200 µl
確 PCB-A5-CS7	CS7	200 µl
確 PCB-A5-CS8	CS8	200 µl
確 PCB-A5-CS9	CS9	200 µl
確 PCB-A5-CS10	CS10	200 µl
確 PCB-A5-CS11	CS11	200 µl

CS5 (ng/ml)	CS6 (ng/ml)	CS7 (ng/ml)	CS8 (ng/ml)	CS9 (ng/ml)	CS10 (ng/ml)	CS11 (ng/ml)
2	5	10	20	50	100	250
2	5	10	20	50	100	250
2	5	10	20	50	100	250
2	5	10	20	50	100	250
2	5	10	20	50	100	250
2	5	10	20	50	100	250
2	5	10	20	50	100	250
2	5	10	20	50	100	250
2	5	10	20	50	100	250
2	5	10	20	50	100	250
2	5	10	20	50	100	250
2	5	10	20	50	100	250
2	5	10	20	50	100	250
2	5	10	20	50	100	250
2	5	10	20	50	100	250
5	5	5	5	5	5	5
5	5	5	5	5	5	5
5	5	5	5	5	5	5
5	5	5	5	5	5	5
5	5	5	5	5	5	5
5	5	5	5	5	5	5
5	5	5	5	5	5	5
5	5	5	5	5	5	5
5	5	5	5	5	5	5
5	5	5	5	5	5	5
5	5	5	5	5	5	5
5	5	5	5	5	5	5
5	5	5	5	5	5	5
5	5	5	5	5	5	5
5	5	5	5	5	5	5
5	5	5	5	5	5	5
5	5	5	5	5	5	5
5	5	5	5	5	5	5
5	5	5	5	5	5	5

PCB-CVS-B10

Catalogue Number	Product (nonane solution)	Qty/Conc
確 PCB-CVS-B10-Set1	CS1/CS2/CS3/CS4/CS5	1Kit (5×200 µl ampoules)
確 PCB-CVS-B10-Set2	CS2/CS3/CS4/CS5/CS6	1Kit (5×200 µl ampoules)
確 PCB-B10-CS1	CS1	200 µl
確 PCB-B10-CS2	CS2	200 µl
確 PCB-B10-CS3	CS3	200 µl
確 PCB-B10-CS4	CS4	200 µl
確 PCB-B10-CS5	CS5	200 µl
確 PCB-B10-CS6	CS6	200 µl
確 PCB-B10-CS7	CS7	200 µl

Native PCB Congeners	*IUPAC*	CS1 (ng/ml)	CS2 (ng/ml)	CS3 (ng/ml)	CS4 (ng/ml)	CS5 (ng/ml)	CS6 (ng/ml)	CS7 (ng/ml)
3,3',4,4'-Tetrachlorobiphenyl	*77*	0.2	1	4	20	100	400	1000
3,4,4',5-Tetrachlorobiphenyl	*81*	0.2	1	4	20	100	400	1000
2,3,3',4,4'-Pentachlorobiphenyl	*105*	0.2	1	4	20	100	400	1000
2,3,4,4',5-Pentachlorobiphenyl	*114*	0.2	1	4	20	100	400	1000
2,3',4,4',5-Pentachlorobiphenyl	*118*	0.2	1	4	20	100	400	1000
2',3,4,4',5-Pentachlorobiphenyl	*123*	0.2	1	4	20	100	400	1000
3,3',4,4',5-Pentachlorobiphenyl	*126*	0.2	1	4	20	100	400	1000
2,3,3',4,4',5-Hexachlorobiphenyl	*156*	0.2	1	4	20	100	400	1000
2,3,3',4,4',5'-Hexachlorobiphenyl	*157*	0.2	1	4	20	100	400	1000
2,3',4,4',5,5'-Hexachlorobiphenyl	*167*	0.2	1	4	20	100	400	1000
3,3',4,4',5,5'-Hexachlorobiphenyl	*169*	0.2	1	4	20	100	400	1000
2,2',3,3',4,4',5-Heptachlorobiphenyl	*170*	0.2	1	4	20	100	400	1000
2,2',3,4,4',5,5'-Heptachlorobiphenyl	*180*	0.2	1	4	20	100	400	1000
2,3,3',4,4',5,5'-Heptachlorobiphenyl	*189*	0.2	1	4	20	100	400	1000
Mass-Labelled PCB Congeners Surrogate/Extraction Spikes								
3,3',4,4'-Tetrachloro[$^{13}C_{12}$]biphenyl	*77L*	10	10	10	10	10	10	10
3,4,4',5-Tetrachloro[$^{13}C_{12}$]biphenyl	*81L*	10	10	10	10	10	10	10
2,3,3',4,4'-Pentachloro[$^{13}C_{12}$]biphenyl	*105L*	10	10	10	10	10	10	10
2,3,4,4',5-Pentachloro[$^{13}C_{12}$]biphenyl	*114L*	10	10	10	10	10	10	10
2,3',4,4',5-Pentachloro[$^{13}C_{12}$]biphenyl	*118L*	10	10	10	10	10	10	10
2',3,4,4',5-Pentachloro[$^{13}C_{12}$]biphenyl	*123L*	10	10	10	10	10	10	10
3,3',4,4',5-Pentachloro[$^{13}C_{12}$]biphenyl	*126L*	10	10	10	10	10	10	10
2,3,3',4,4',5-Hexachloro[$^{13}C_{12}$]biphenyl	*156L*	10	10	10	10	10	10	10
2,3,3',4,4',5'-Hexachloro[$^{13}C_{12}$]biphenyl	*157L*	10	10	10	10	10	10	10
2,3',4,4',5,5'-Hexachloro[$^{13}C_{12}$]biphenyl	*167L*	10	10	10	10	10	10	10
3,3',4,4',5,5'-Hexachloro[$^{13}C_{12}$]biphenyl	*169L*	10	10	10	10	10	10	10
2,2',3,3',4,4',5-Heptachloro[$^{13}C_{12}$]biphenyl	*170L*	10	10	10	10	10	10	10
2,2',3,4,4',5,5'-Heptachloro[$^{13}C_{12}$]biphenyl	*180L*	10	10	10	10	10	10	10
2,3,3',4,4',5,5'-Heptachloro[$^{13}C_{12}$]biphenyl	*189L*	10	10	10	10	10	10	10
Sampling and Syringe Spikes								
* 3,3',4,5'-Tetrachloro[$^{13}C_{12}$]biphenyl	*79L*	10	10	10	10	10	10	10
** 2,3',4',5-Tetrachloro[$^{13}C_{12}$]biphenyl	*70L*	10	10	10	10	10	10	10
** 2,3,3',5,5'-Pentachloro[$^{13}C_{12}$]biphenyl	*111L*	10	10	10	10	10	10	10
** 2,2',3,4,4',5'-Hexachloro[$^{13}C_{12}$]biphenyl	*138L*	10	10	10	10	10	10	10
** 2,2',3,3',5,5',6-Heptachloro[$^{13}C_{12}$]biphenyl	*178L*	10	10	10	10	10	10	10

* for pre-sampling spike
** for syringe spike/recovery standard

確 第一種特定化学物質

ダイオキシン類検量線作成用標準液

SUPPORT SOLUTIONS

Mass-Labelled

PCDDs/PCDFs/DL-PCBs Solution/Mixtures
PCDDs/PCDFs Solution/Mixtures
DL-PCBs Solution/Mixtures
PCBs Individual Solutions

NATIVE SOLUTION/MIXTURES

Native

PCDDs/PCDFs/DL-PCBs Solution/Mixtures
PCDDs/PCDFs Solution/Mixtures
DL-PCBs Solution/Mixtures

DFP-LCS-B

Support Solutions for **DFP-CVS-B10, DF-CVS-C10** and **PCB-CVS-B10**

Catalogue Number	Product (nonane solution)	Qty/Conc
確 **DFP-LCS-B**	Mass-Labelled PCDD/PCDF/PCB Solution/Mixture	1.2 ml
確 **DFP-LCS-B100**	Mass-Labelled PCDD/PCDF/PCB Solution/Mixture	1.2 ml
確 **DFP-LCS-B20**	Mass-Labelled PCDD/PCDF/PCB Solution/Mixture	1.2 ml
確 **DFP-LCS-A**	Mass-Labelled PCDD/PCDF/PCB Solution/Mixture	1.2 ml

Mass-Labelled PCDDs & PCDFs		**DFP-LCS-B** (ng/ml)	**DFP-LCS-B100** (ng/ml)	**DFP-LCS-B20** (ng/ml)	**DFP-LCS-A** (ng/ml)
1,3,6,8-Tetrachloro[$^{13}C_{12}$]dibenzo-p-dioxin		1000	100	20	—
2,3,7,8-Tetrachloro[$^{13}C_{12}$]dibenzo-p-dioxin		1000	100	20	10
1,2,3,7,8-Pentachloro[$^{13}C_{12}$]dibenzo-p-dioxin		1000	100	20	10
1,2,3,4,7,8-Hexachloro[$^{13}C_{12}$]dibenzo-p-dioxin		1000	100	20	10
1,2,3,6,7,8-Hexachloro[$^{13}C_{12}$]dibenzo-p-dioxin		1000	100	20	10
1,2,3,7,8,9-Hexachloro[$^{13}C_{12}$]dibenzo-p-dioxin		1000	100	20	10
1,2,3,4,6,7,8-Heptachloro[$^{13}C_{12}$]dibenzo-p-dioxin		1000	100	20	10
Octachloro[$^{13}C_{12}$]dibenzo-p-dioxin		2000	200	40	20
2,3,7,8-Tetrachloro[$^{13}C_{12}$]dibenzofuran		1000	100	20	10
1,2,3,7,8-Pentachloro[$^{13}C_{12}$]dibenzofuran		1000	100	20	10
2,3,4,7,8-Pentachloro[$^{13}C_{12}$]dibenzofuran		1000	100	20	10
1,2,3,4,7,8-Hexachloro[$^{13}C_{12}$]dibenzofuran		1000	100	20	10
1,2,3,6,7,8-Hexachloro[$^{13}C_{12}$]dibenzofuran		1000	100	20	10
1,2,3,7,8,9-Hexachloro[$^{13}C_{12}$]dibenzofuran		1000	100	20	10
2,3,4,6,7,8-Hexachloro[$^{13}C_{12}$]dibenzofuran		1000	100	20	10
1,2,3,4,6,7,8-Heptachloro[$^{13}C_{12}$]dibenzofuran		1000	100	20	10
1,2,3,4,7,8,9-Heptachloro[$^{13}C_{12}$]dibenzofuran		1000	100	20	10
Octachloro[$^{13}C_{12}$]dibenzofuran		2000	200	40	20
Mass-Labelled PCB Congeners	***IUPAC***				
3,3',4,4'-Tetrachloro[$^{13}C_{12}$]biphenyl	*77L*	1000	100	20	10
3,4,4',5-Tetrachloro[$^{13}C_{12}$]biphenyl	*81L*	1000	100	20	10
2,3,3',4,4'-Pentachloro[$^{13}C_{12}$]biphenyl	*105L*	1000	100	20	10
2,3,4,4',5-Pentachloro[$^{13}C_{12}$]biphenyl	*114L*	1000	100	20	10
2,3',4,4',5-Pentahloro[$^{13}C_{12}$]biphenyl	*118L*	1000	100	20	10
2',3,4,4',5-Pentachloro[$^{13}C_{12}$]biphenyl	*123L*	1000	100	20	10
3,3',4,4',5-Pentachloro[$^{13}C_{12}$]biphenyl	*126L*	1000	100	20	10
2,3,3',4,4',5-Hexachloro[$^{13}C_{12}$]biphenyl	*156L*	1000	100	20	10
2,3,3',4,4',5'-Hexachloro[$^{13}C_{12}$]biphenyl	*157L*	1000	100	20	10
2,3',4,4',5,5'-Hexachloro[$^{13}C_{12}$]biphenyl	*167L*	1000	100	20	10
3,3',4,4',5,5'-Hexachloro[$^{13}C_{12}$]biphenyl	*169L*	1000	100	20	10
2,2',3,3',4,4',5-Heptachloro[$^{13}C_{12}$]biphenyl	*170L*	1000	100	20	10
2,2',3,4,4',5,5'-Heptachloro[$^{13}C_{12}$]biphenyl	*180L*	1000	100	20	10
2,3,3',4,4',5,5'-Heptachloro[$^{13}C_{12}$]biphenyl	*189L*	1000	100	20	10

確 第一種特定化学物質

Support Solutions for **DF-CVS-A10, DF-CVS-A5, DF-CVS-B10 and DF-CVS-C10**

Catalogue Number	Product (nonane solution)	Qty/Conc
DF-LCS-A	Mass-Labelled PCDD/PCDF Solution/Mixture	1.2 ml
DF-LCS-A200	Mass-Labelled PCDD/PCDF Solution/Mixture	1.2 ml
DF-LCS-A40	Mass-Labelled PCDD/PCDF Solution/Mixture	1.2 ml
DF-LCS-A20	Mass-Labelled PCDD/PCDF Solution/Mixture	1.2 ml

Mass-Labelled PCDDs	**DF-LCS-A** (ng/ml)	**DF-LCS-A200** (ng/ml)	**DF-LCS-A40** (ng/ml)	**DF-LCS-A20** (ng/ml)
1,3,6,8-Tetrachloro[$^{13}C_{12}$]dibenzo-p-dioxin	1000	200	40	20
2,3,7,8-Tetrachloro[$^{13}C_{12}$]dibenzo-p-dioxin	1000	200	40	20
1,2,3,7,8-Pentachloro[$^{13}C_{12}$]dibenzo-p-dioxin	1000	200	40	20
1,2,3,4,7,8-Hexachloro[$^{13}C_{12}$]dibenzo-p-dioxin	1000	200	40	20
1,2,3,6,7,8-Hexachloro[$^{13}C_{12}$]dibenzo-p-dioxin	1000	200	40	20
1,2,3,7,8,9-Hexachloro[$^{13}C_{12}$]dibenzo-p-dioxin	1000	200	40	20
1,2,3,4,6,7,8-Heptachloro[$^{13}C_{12}$]dibenzo-p-dioxin	1000	200	40	20
Octachloro[$^{13}C_{12}$]dibenzo-p-dioxin	2000	400	80	40
Mass-Labelled PCDFs				
1,3,6,8-Tetrachloro[$^{13}C_{12}$]dibenzofuran	1000	200	40	20
2,3,7,8-Tetrachloro[$^{13}C_{12}$]dibenzofuran	1000	200	40	20
1,2,3,7,8-Pentachloro[$^{13}C_{12}$]dibenzofuran	1000	200	40	20
2,3,4,7,8-Pentachloro[$^{13}C_{12}$]dibenzofuran	1000	200	40	20
1,2,3,4,7,8-Hexachloro[$^{13}C_{12}$]dibenzofuran	1000	200	40	20
1,2,3,6,7,8-Hexachloro[$^{13}C_{12}$]dibenzofuran	1000	200	40	20
1,2,3,7,8,9-Hexachloro[$^{13}C_{12}$]dibenzofuran	1000	200	40	20
2,3,4,6,7,8-Hexachloro[$^{13}C_{12}$]dibenzofuran	1000	200	40	20
1,2,3,4,6,7,8-Heptachloro[$^{13}C_{12}$]dibenzofuran	1000	200	40	20
1,2,3,4,7,8,9-Heptachloro[$^{13}C_{12}$]dibenzofuran	1000	200	40	20
Octachloro[$^{13}C_{12}$]dibenzofuran	2000	400	80	40

DF-LCS-B

Support Solutions for **DF-CVS-A10, DF-CVS-A5, DF-CVS-B10, DF-CVS-C10 and DFP-CVS-B10**

Catalogue Number	Product (nonane solution)	Qty/Conc
DF-LCS-B	Mass-Labelled PCDD/PCDF Solution/Mixture	1.2 ml
DF-LCS-B200	Mass-Labelled PCDD/PCDF Solution/Mixture	1.2 ml
DF-LCS-B100	Mass-Labelled PCDD/PCDF Solution/Mixture	1.2 ml
DF-LCS-B40	Mass-Labelled PCDD/PCDF Solution/Mixture	1.2 ml
DF-LCS-B20	Mass-Labelled PCDD/PCDF Solution/Mixture	1.2 ml

Mass-Labelled PCDDs	DF-LCS-B (ng/ml)	DF-LCS-B200 (ng/ml)	DF-LCS-B100 (ng/ml)	DF-LCS-B40 (ng/ml)	DF-LCS-B20 (ng/ml)
1,3,6,8-Tetrachloro[$^{13}C_{12}$]dibenzo-p-dioxin	1000	200	100	40	20
2,3,7,8-Tetrachloro[$^{13}C_{12}$]dibenzo-p-dioxin	1000	200	100	40	20
1,2,3,7,8-Pentachloro[$^{13}C_{12}$]dibenzo-p-dioxin	1000	200	100	40	20
1,2,3,4,7,8-Hexachloro[$^{13}C_{12}$]dibenzo-p-dioxin	1000	200	100	40	20
1,2,3,6,7,8-Hexachloro[$^{13}C_{12}$]dibenzo-p-dioxin	1000	200	100	40	20
1,2,3,7,8,9-Hexachloro[$^{13}C_{12}$]dibenzo-p-dioxin	1000	200	100	40	20
1,2,3,4,6,7,8-Heptachloro[$^{13}C_{12}$]dibenzo-p-dioxin	1000	200	100	40	20
Octachloro[$^{13}C_{12}$]dibenzo-p-dioxin	2000	400	200	80	40
Mass-Labelled PCDFs					
2,3,7,8-Tetrachloro[$^{13}C_{12}$]dibenzofuran	1000	200	100	40	20
1,2,3,7,8-Pentachloro[$^{13}C_{12}$]dibenzofuran	1000	200	100	40	20
2,3,4,7,8-Pentachloro[$^{13}C_{12}$]dibenzofuran	1000	200	100	40	20
1,2,3,4,7,8-Hexachloro[$^{13}C_{12}$]dibenzofuran	1000	200	100	40	20
1,2,3,6,7,8-Hexachloro[$^{13}C_{12}$]dibenzofuran	1000	200	100	40	20
1,2,3,7,8,9-Hexachloro[$^{13}C_{12}$]dibenzofuran	1000	200	100	40	20
2,3,4,6,7,8-Hexachloro[$^{13}C_{12}$]dibenzofuran	1000	200	100	40	20
1,2,3,4,6,7,8-Heptachloro[$^{13}C_{12}$]dibenzofuran	1000	200	100	40	20
1,2,3,4,7,8,9-Heptachloro[$^{13}C_{12}$]dibenzofuran	1000	200	100	40	20
Octachloro[$^{13}C_{12}$]dibenzofuran	2000	400	200	80	40

Support Solutions for **DF-CVS-A10, DF-CVS-A5, DF-CVS-B10 and DF-CVS-C10**

Catalogue Number	Product (nonane solution)	Qty/Conc
DF-LCS-C	Mass-Labelled PCDD/PCDF Solution/Mixture	1.2 ml
DF-LCS-C200	Mass-Labelled PCDD/PCDF Solution/Mixture	1.2 ml
DF-LCS-C100	Mass-Labelled PCDD/PCDF Solution/Mixture	1.2 ml
DF-LCS-C40	Mass-Labelled PCDD/PCDF Solution/Mixture	1.2 ml

Mass-Labelled PCDDs	DF-LCS-C (ng/ml)	DF-LCS-C200 (ng/ml)	DF-LCS-C100 (ng/ml)	DF-LCS-C40 (ng/ml)
2,3,7,8-Tetrachloro[$^{13}C_{12}$]dibenzo-p-dioxin	1000	200	100	40
1,2,3,7,8-Pentachloro[$^{13}C_{12}$]dibenzo-p-dioxin	1000	200	100	40
1,2,3,4,7,8-Hexachloro[$^{13}C_{12}$]dibenzo-p-dioxin	1000	200	100	40
1,2,3,6,7,8-Hexachloro[$^{13}C_{12}$]dibenzo-p-dioxin	1000	200	100	40
1,2,3,7,8,9-Hexachloro[$^{13}C_{12}$]dibenzo-p-dioxin	1000	200	100	40
1,2,3,4,6,7,8-Heptachloro[$^{13}C_{12}$]dibenzo-p-dioxin	1000	200	100	40
Octachloro[$^{13}C_{12}$]dibenzo-p-dioxin	2000	400	200	80
Mass-Labelled PCDFs				
2,3,7,8-Tetrachloro[$^{13}C_{12}$]dibenzofuran	1000	200	100	40
1,2,3,7,8-Pentachloro[$^{13}C_{12}$]dibenzofuran	1000	200	100	40
2,3,4,7,8-Pentachloro[$^{13}C_{12}$]dibenzofuran	1000	200	100	40
1,2,3,4,7,8-Hexachloro[$^{13}C_{12}$]dibenzofuran	1000	200	100	40
1,2,3,6,7,8-Hexachloro[$^{13}C_{12}$]dibenzofuran	1000	200	100	40
1,2,3,7,8,9-Hexachloro[$^{13}C_{12}$]dibenzofuran	1000	200	100	40
2,3,4,6,7,8-Hexachloro[$^{13}C_{12}$]dibenzofuran	1000	200	100	40
1,2,3,4,6,7,8-Heptachloro[$^{13}C_{12}$]dibenzofuran	1000	200	100	40
1,2,3,4,7,8,9-Heptachloro[$^{13}C_{12}$]dibenzofuran	1000	200	100	40
Octachloro[$^{13}C_{12}$]dibenzofuran	2000	400	200	80

MASS-LABELLED PCDDs & PCDFs: SOLUTION/MIXTURES

Support Solutions for **DF-CVS-A10, DF-CVS-A5** and **DF-CVS-B10**

Catalogue Number	Product (nonane solution)	Qty/Conc
DF-IS-A	Mass-Labelled PCDD Internal Standard Solution	1.2 ml
DF-IS-A200	Mass-Labelled PCDD Internal Standard Solution	1.2 ml
DF-IS-A40	Mass-Labelled PCDD Internal Standard Solution	1.2 ml

Mass-Labelled PCDD	**DF-IS-A** (ng/ml)	**DF-IS-A200** (ng/ml)	**DF-IS-A40** (ng/ml)
1,2,3,4-Tetrachloro[$^{13}C_{12}$]dibenzo-p-dioxin	1000	200	40

DF-IS-B	Mass-Labelled PCDD/PCDF Internal Standard Solution	1.2 ml
DF-IS-B200	Mass-Labelled PCDD/PCDF Internal Standard Solution	1.2 ml
DF-IS-B40	Mass-Labelled PCDD/PCDF Internal Standard Solution	1.2 ml

Mass-Labelled PCDD/PCDF	**DF-IS-B** (ng/ml)	**DF-IS-B200** (ng/ml)	**DF-IS-B40** (ng/ml)
1,2,3,4-Tetrachloro[$^{13}C_{12}$]dibenzo-p-dioxin	1000	200	40
1,2,3,4-Tetrachloro[$^{13}C_{12}$]dibenzofuran	1000	200	40

DF-IS-C	Mass-Labelled PCDD/PCDF Internal Standard Solution	1.2 ml
DF-IS-C200	Mass-Labelled PCDD/PCDF Internal Standard Solution	1.2 ml
DF-IS-C40	Mass-Labelled PCDD/PCDF Internal Standard Solution	1.2 ml

Mass-Labelled PCDD/PCDF	**DF-IS-C** (ng/ml)	**DF-IS-C200** (ng/ml)	**DF-IS-C40** (ng/ml)
1,2,3,4-Tetrachloro[$^{13}C_{12}$]dibenzo-p-dioxin	1000	200	40
1,2,7,8-Tetrachloro[$^{13}C_{12}$]dibenzofuran	1000	200	40

DF-IS-D	Mass-Labelled PCDD/PCDF Internal Standard Solution	1.2 ml
DF-IS-D200	Mass-Labelled PCDD/PCDF Internal Standard Solution	1.2 ml
DF-IS-D40	Mass-Labelled PCDD/PCDF Internal Standard Solution	1.2 ml

Mass-Labelled PCDD/PCDF	**DF-IS-D** (ng/ml)	**DF-IS-D200** (ng/ml)	**DF-IS-D40** (ng/ml)
1,3,6,8-Tetrachloro[$^{13}C_{12}$]dibenzo-p-dioxin	1000	200	40
1,3,6,8-Tetrachloro[$^{13}C_{12}$]dibenzofuran	1000	200	40

Support Solutions for **DF-CVS-A10, DF-CVS-A5** and **DF-CVS-B10**

Catalogue Number	Product (nonane solution)	Qty/Conc
DF-IS-E	Mass-Labelled PCDF Internal Standard Solution	1.2 ml
DF-IS-E200	Mass-Labelled PCDF Internal Standard Solution	1.2 ml
DF-IS-E40	Mass-Labelled PCDF Internal Standard Solution	1.2 ml

Mass-Labelled PCDFs	DF-IS-E (ng/ml)	DF-IS-E200 (ng/ml)	DF-IS-E40 (ng/ml)
1,3,6,8-Tetrachloro[$^{13}C_{12}$]dibenzofuran	1000	200	40
1,2,3,4,6,8,9-Heptachloro[$^{13}C_{12}$]dibenzofuran	1000	200	40

DF-IS-F	Mass-Labelled PCDF Internal Standard Solution	1.2 ml
DF-IS-F200	Mass-Labelled PCDF Internal Standard Solution	1.2 ml
DF-IS-F40	Mass-Labelled PCDF Internal Standard Solution	1.2 ml

Mass-Labelled PCDFs	DF-IS-F (ng/ml)	DF-IS-F200 (ng/ml)	DF-IS-F40 (ng/ml)
1,2,7,8-Tetrachloro[$^{13}C_{12}$]dibenzofuran	1000	200	40
1,2,3,4,6,8,9-Heptachloro[$^{13}C_{12}$]dibenzofuran	1000	200	40

DF-IS-G	Mass-Labelled PCDF Internal Standard Solution	1.2 ml
DF-IS-G200	Mass-Labelled PCDF Internal Standard Solution	1.2 ml
DF-IS-G40	Mass-Labelled PCDF Internal Standard Solution	1.2 ml

Mass-Labelled PCDFs	DF-IS-G (ng/ml)	DF-IS-G200 (ng/ml)	DF-IS-G40 (ng/ml)
1,2,3,4,6-Pentachloro[$^{13}C_{12}$]dibenzofuran	1000	200	40
1,2,3,4,6,8,9-Heptachloro[$^{13}C_{12}$]dibenzofuran	1000	200	40

DF-IS-H	Mass-Labelled PCDF Internal Standard Solution	1.2 ml
DF-IS-H200	Mass-Labelled PCDF Internal Standard Solution	1.2 ml
DF-IS-H40	Mass-Labelled PCDF Internal Standard Solution	1.2 ml

Mass-Labelled PCDFs	DF-IS-H (ng/ml)	DF-IS-H200 (ng/ml)	DF-IS-H40 (ng/ml)
1,2,3,4,6,9-Hexachloro[$^{13}C_{12}$]dibenzofuran	1000	200	40
1,2,3,4,6,8,9-Heptachloro[$^{13}C_{12}$]dibenzofuran	1000	200	40

DF-IS-I	Mass-Labelled PCDF Internal Standard Solution	1.2 ml
DF-IS-I200	Mass-Labelled PCDF Internal Standard Solution	1.2 ml
DF-IS-I40	Mass-Labelled PCDF Internal Standard Solution	1.2 ml

Mass-Labelled PCDFs	DF-IS-I (ng/ml)	DF-IS-I200 (ng/ml)	DF-IS-I40 (ng/ml)
1,2,7,8-Tetrachloro[$^{13}C_{12}$]dibenzofuran	1000	200	40
1,2,3,4,6-Pentachloro[$^{13}C_{12}$]dibenzofuran	1000	200	40
1,2,3,4,6,9-Hexachloro[$^{13}C_{12}$]dibenzofuran	1000	200	40
1,2,3,4,6,8,9-Heptachloro[$^{13}C_{12}$]dibenzofuran	1000	200	40

MASS-LABELLED PCDDs & PCDFs: SOLUTION/MIXTURES

Support Solutions for **DF-CVS-A10, DF-CVS-A5** and **DF-CVS-B10**

Catalogue Number	Product (nonane solution)		Qty/Conc
確 **DFP-IS-A**	Mass-Labelled PCDF/PCB Syringe Spike		1.2 ml
Mass-Labelled PCB Congener		***IUPAC***	**DFP-IS-A**
2,3',4',5-Tetrachloro[$^{13}C_{12}$]biphenyl		*70L*	10 ng/ml
Mass-Labelled PCDFs			
1,2,3,4,6,9-Hexachloro[$^{13}C_{12}$]dibenzofuran			10 ng/ml
1,2,3,4,6,8,9-Heptachloro[$^{13}C_{12}$]dibenzofuran			10 ng/ml
確 **DFP-SS-A**	Mass-Labelled PCDD/PCB Sampling Spike		1.2 ml
Mass-Labelled PCB Congener		***IUPAC***	**DFP-SS-A**
3,3',4,5'-Tetrachloro[$^{13}C_{12}$]biphenyl		*79L*	50 ng/ml
Mass-Labelled PCDD			
1,2,3,4-Tetrachloro[$^{13}C_{12}$]dibenzo-p-dioxin			50 ng/ml
MDF-1278-1			1.2 ml
1,2,7,8-Tetrachloro[$^{13}C_{12}$]dibenzofuran			1 µg/ml
MDF-12346-1			1.2 ml
1,2,3,4,6-Pentachloro[$^{13}C_{12}$]dibenzofuran			1 µg/ml
MDF-123469-1			1.2 ml
1,2,3,4,6,9-Hexachloro[$^{13}C_{12}$]dibenzofuran			1 µg/ml
MDF-1234689-1			1.2 ml
1,2,3,4,6,8,9-Heptachloro[$^{13}C_{12}$]dibenzofuran			1 µg/ml

確 第一種特定化学物質

MASS-LABELLED PCDDs & PCDFs: SOLUTION/MIXTURES

Support Solutions for **DFP-CVS-B10** and **DF-CVS-C10**

Catalogue Number	Product (nonane solution)	Qty/Conc
DF-IS-J	Mass-Labelled PCDD Syringe Spike Solution	1.2 ml
DF-IS-J100	Mass-Labelled PCDD Syringe Spike Solution	1.2 ml
DF-IS-J20	Mass-Labelled PCDD Syringe Spike Solution	1.2 ml

Mass-Labelled PCDDs	DF-IS-J (ng/ml)	DF-IS-J100 (ng/ml)	DF-IS-J20 (ng/ml)
1,3,7,8-Tetrachloro[$^{13}C_{12}$]dibenzo-p-dioxin	1000	100	20
1,2,4,7,8-Pentachloro[$^{13}C_{12}$]dibenzo-p-dioxin	1000	100	20
1,2,3,4,6,8-Hexachloro[$^{13}C_{12}$]dibenzo-p-dioxin	1000	100	20
1,2,3,4,6,7,9-Heptachloro[$^{13}C_{12}$]dibenzo-p-dioxin	1000	100	20

DF-SS-A	Mass-Labelled PCDD Sampling Spike Solution	1.2 ml
DF-SS-A100	Mass-Labelled PCDD Sampling Spike Solution	1.2 ml
DF-SS-A20	Mass-Labelled PCDD Sampling Spike Solution	1.2 ml

Mass-Labelled PCDD	DF-SS-A (ng/ml)	DF-SS-A100 (ng/ml)	DF-SS-A20 (ng/ml)
1,2,3,4-Tetrachloro[$^{13}C_{12}$]dibenzo-p-dioxin	1000	100	20

MASS-LABELLED PCDDs & DL-PCBs: SOLUTION/MIXTURES

Support Solutions for **DFP-CVS-B10** and **DFP-CVS-B1**

Catalogue Number	Product (nonane solution)	Qty/Conc
確 DFP-IS-B10	Mass-Labelled PCDD/PCB Syringe Spike Solution	1.2ml

Mass-Labelled PCDDs		DFP-IS-B10 (ng/ml)
1,3,7,8-Tetrachloro[$^{13}C_{12}$]dibenzo-p-dioxin		10
1,2,4,7,8-Pentachloro[$^{13}C_{12}$]dibenzo-p-dioxin		10
1,2,3,4,6,8-Hexachloro[$^{13}C_{12}$]dibenzo-p-dioxin		10
1,2,3,4,6,7,9-Heptachloro[$^{13}C_{12}$]dibenzo-p-dioxin		10
Mass-Labelled PCB Congeners	***IUPAC***	
2,3',4',5-Tetrachloro[$^{13}C_{12}$]biphenyl	*70L*	10
2,3,3',5,5'-Pentachloro[$^{13}C_{12}$]biphenyl	*111L*	10
2,2',3,4,4',5'-Hexachloro[$^{13}C_{12}$]biphenyl	*138L*	10
2,2',3,3',5,5',6-Heptachloro[$^{13}C_{12}$]biphenyl	*178L*	10

確 DFP-SS-A10	Mass-Labelled PCDD/PCB Sampling Spike Solution	1.2ml

Mass-Labelled PCDD		DFP-SS-A10 (ng/ml)
1,2,3,4-Tetrachloro[$^{13}C_{12}$]dibenzo-p-dioxin		10
Mass-Labelled PCB Congener	***IUPAC***	
3,3',4,5'-Tetrachloro[$^{13}C_{12}$]biphenyl	*79L*	10

NATIVE PCDDs & PCDFs: SOLUTION/MIXTURES

Support Solutions for **DF-CVS-A10, DF-CVS-A5** and **DF-CVS-B10**

Catalogue Number	Product (nonane solution)	Qty/Conc
DF-ST-A	Native PCDD/PCDF Solution/Mixture	1.2 ml
NK-ST-A4	Native PCDD/PCDF Solution/Mixture	1.2 ml
DF-ST-B	Native PCDD/PCDF Solution/Mixture	1.2 ml
DF-ST-C10	Native PCDD/PCDF Solution/Mixture	1.2 ml
確 DFP-ST-C10	Native PCDD/PCDF/PCB Solution/Mixture	1.2 ml

	DF-ST-A (ng/ml)	NK-ST-A4 (ng/ml)	DF-ST-B (ng/ml)	DF-ST-C10 (ng/ml)	DFP-ST-C10 (ng/ml)
NATIVE PCDDs					
1,2,8,9-Tetrachlorodibenzo-p-dioxin	1000	—	1000	10	10
1,3,6,8-Tetrachlorodibenzo-p-dioxin	1000	—	1000	10	10
1,3,7,9-Tetrachlorodibenzo-p-dioxin	1000	—	1000	—	—
2,3,7,8-Tetrachlorodibenzo-p-dioxin	1000	2	1000	10	10
1,2,3,7,8-Pentachlorodibenzo-p-dioxin	1000	2	1000	10	10
1,2,3,4,7,8-Hexachlorodibenzo-p-dioxin	1000	2	2000	20	20
1,2,3,6,7,8-Hexachlorodibenzo-p-dioxin	1000	2	2000	20	20
1,2,3,7,8,9-Hexachlorodibenzo-p-dioxin	1000	2	2000	20	20
1,2,3,4,6,7,8-Heptachlorodibenzo-p-dioxin	1000	2	2000	20	20
Octachlorodibenzo-p-dioxin	2000	4	5000	50	50
NATIVE PCDFs					
1,2,7,8-Tetrachlorodibenzofuran	1000	—	1000	—	—
1,2,8,9-Tetrachlorodibenzofuran	1000	—	1000	10	10
1,3,6,8-Tetrachlorodibenzofuran	1000	—	1000	10	10
2,3,7,8-Tetrachlorodibenzofuran	1000	2	1000	10	10
1,2,3,7,8-Pentachlorodibenzofuran	1000	2	1000	10	10
2,3,4,7,8-Pentachlorodibenzofuran	1000	2	1000	10	10
1,2,3,4,7,8-Hexachlorodibenzofuran	1000	2	2000	20	20
1,2,3,6,7,8-Hexachlorodibenzofuran	1000	2	2000	20	20
1,2,3,7,8,9-Hexachlorodibenzofuran	1000	2	2000	20	20
2,3,4,6,7,8-Hexachlorodibenzofuran	1000	2	2000	20	20
1,2,3,4,6,7,8-Heptachlorodibenzofuran	1000	2	2000	20	20
1,2,3,4,7,8,9-Heptachlorodibenzofuran	1000	2	2000	20	20
Octachlorodibenzofuran	2000	4	5000	50	50

Native PCB Congeners	***IUPAC***	
3,3',4,4'-Tetrachlorobiphenyl	*77*	20
3,4,4',5-Tetrachlorobiphenyl	*81*	20
2,3,3',4,4'-Pentachlorobiphenyl	*105*	20
2,3,4,4',5-Pentachlorobiphenyl	*114*	20
2,3',4,4',5-Pentachlorobiphenyl	*118*	20
2',3,4,4',5-Pentachlorobiphenyl	*123*	20
3,3',4,4',5-Pentachlorobiphenyl	*126*	20
2,3,3',4,4',5-Hexachlorobiphenyl	*156*	20
2,3,3',4,4',5'-Hexachlorobiphenyl	*157*	20
2,3',4,4',5,5'-Hexachlorobiphenyl	*167*	20
3,3',4,4',5,5'-Hexachlorobiphenyl	*169*	20
2,2',3,3',4,4',5-Heptachlorobiphenyl	*170*	20
2,2',3,4,4',5,5'-Heptachlorobiphenyl	*180*	20
2,3,3',4,4',5,5'-Heptachlorobiphenyl	*189*	20

確 第一種特定化学物質

Catalogue Number	Product	Qty/Conc
確 MBP-1	2-Chloro[$^{13}C_{12}$]biphenyl	1.2 ml / 50 µg/ml
確 MBP-3	4-Chloro[$^{13}C_{12}$]biphenyl	1.2 ml / 50 µg/ml
確 MBP-4	2,2'-Dichloro[$^{13}C_{12}$]biphenyl	1.2 ml / 50 µg/ml
確 MBP-8	2,4'-Dichloro[$^{13}C_{12}$]biphenyl	1.2 ml / 50 µg/ml
確 MBP-9	2,5-Dichloro[$^{13}C_{12}$]biphenyl	1.2 ml / 50 µg/ml
確 MBP-11	3,3'-Dichloro[$^{13}C_{12}$]biphenyl	1.2 ml / 50 µg/ml
確 MBP-15	4,4'-Dichloro[$^{13}C_{12}$]biphenyl	1.2 ml / 50 µg/ml
確 MBP-19	2,2',6-Trichloro[$^{13}C_{12}$]biphenyl	1.2 ml / 50 µg/ml
確 MBP-28	2,4,4'-Trichloro[$^{13}C_{12}$]biphenyl	1.2 ml / 50 µg/ml
確 MBP-31	2,4',5-Trichloro[$^{13}C_{12}$]biphenyl	1.2 ml / 50 µg/ml
確 MBP-37	3,4,4'-Trichloro[$^{13}C_{12}$]biphenyl	1.2 ml / 50 µg/ml
確 MBP-52	2,2',5,5'-Tetrachloro[$^{13}C_{12}$]biphenyl	1.2 ml / 50 µg/ml
確 MBP-54	2,2',6,6'-Tetrachloro[$^{13}C_{12}$]biphenyl	1.2 ml / 50 µg/ml
確 MBP-60	2,3,4,4'-Tetrachloro[$^{13}C_{12}$]biphenyl	1.2 ml / 50 µg/ml
確 MBP-70	2,3',4',5-Tetrachloro[$^{13}C_{12}$]biphenyl	1.2 ml / 50 µg/ml
確 MBP-77	3,3',4,4'-Tetrachloro[$^{13}C_{12}$]biphenyl	1.2 ml / 50 µg/ml
確 MBP-79	3,3',4,5'-Tetrachloro[$^{13}C_{12}$]biphenyl	1.2 ml / 50 µg/ml
確 MBP-81	3,4,4',5-Tetrachloro[$^{13}C_{12}$]biphenyl	1.2 ml / 50 µg/ml
確 MBP-95	2,2',3,5',6-Pentachloro[$^{13}C_{12}$]biphenyl	1.2 ml / 50 µg/ml
確 MBP-101	2,2',4,5,5'-Pentachloro[$^{13}C_{12}$]biphenyl	1.2 ml / 50 µg/ml
確 MBP-104	2,2',4,6,6'-Pentachloro[$^{13}C_{12}$]biphenyl	1.2 ml / 50 µg/ml
確 MBP-105	2,3,3',4,4'-Pentachloro[$^{13}C_{12}$]biphenyl	1.2 ml / 50 µg/ml
確 MBP-111	2,3,3',5,5'-Pentachloro[$^{13}C_{12}$]biphenyl	1.2 ml / 50 µg/ml
確 MBP-114	2,3,4,4',5-Pentachloro[$^{13}C_{12}$]biphenyl	1.2 ml / 50 µg/ml
確 MBP-118	2,3',4,4',5-Pentachloro[$^{13}C_{12}$]biphenyl	1.2 ml / 50 µg/ml
確 MBP-123	2',3,4,4',5-Pentachloro[$^{13}C_{12}$]biphenyl	1.2 ml / 50 µg/ml
確 MBP-126	3,3',4,4',5-Pentachloro[$^{13}C_{12}$]biphenyl	1.2 ml / 50 µg/ml
確 MBP-127	3,3',4,5,5'-Pentachloro[$^{13}C_{12}$]biphenyl	1.2 ml / 50 µg/ml
確 MBP-133	2,2',3,3',5,5'-Hexachloro[$^{13}C_{12}$]biphenyl	1.2 ml / 50 µg/ml
確 MBP-138	2,2',3,4,4',5'-Hexachloro[$^{13}C_{12}$]biphenyl	1.2 ml / 50 µg/ml
確 MBP-153	2,2',4,4',5,5'-Hexachloro[$^{13}C_{12}$]biphenyl	1.2 ml / 50 µg/ml
確 MBP-155	2,2',4,4',6,6'-Hexachloro[$^{13}C_{12}$]biphenyl	1.2 ml / 50 µg/ml
確 MBP-156	2,3,3',4,4',5-Hexachloro[$^{13}C_{12}$]biphenyl	1.2 ml / 50 µg/ml
確 MBP-157	2,3,3',4,4',5'-Hexachloro[$^{13}C_{12}$]biphenyl	1.2 ml / 50 µg/ml
確 MBP-159	2,3,3',4,5,5'-Hexachloro[$^{13}C_{12}$]biphenyl	1.2 ml / 50 µg/ml
確 MBP-162	2,3,3',4',5,5'-Hexachloro[$^{13}C_{12}$]biphenyl	1.2 ml / 50 µg/ml
確 MBP-167	2,3',4,4',5,5'-Hexachloro[$^{13}C_{12}$]biphenyl	1.2 ml / 50 µg/ml
確 MBP-169	3,3',4,4',5,5'-Hexachloro[$^{13}C_{12}$]biphenyl	1.2 ml / 50 µg/ml
確 MBP-170	2,2',3,3',4,4',5-Heptachloro[$^{13}C_{12}$]biphenyl	1.2 ml / 50 µg/ml
確 MBP-178	2,2',3,3',5,5',6-Heptachloro[$^{13}C_{12}$]biphenyl	1.2 ml / 50 µg/ml
確 MBP-180	2,2',3,4,4',5,5'-Heptachloro[$^{13}C_{12}$]biphenyl	1.2 ml / 50 µg/ml
確 MBP-188	2,2',3,4',5,6,6'-Heptachloro[$^{13}C_{12}$]biphenyl	1.2 ml / 50 µg/ml
確 MBP-189	2,3,3',4,4',5,5'-Heptachloro[$^{13}C_{12}$]biphenyl	1.2 ml / 50 µg/ml
確 MBP-194	2,2',3,3',4,4',5,5'-Octachloro[$^{13}C_{12}$]biphenyl	1.2 ml / 50 µg/ml
確 MBP-202	2,2',3,3',5,5',6,6'-Octachloro[$^{13}C_{12}$]biphenyl	1.2 ml / 50 µg/ml
確 MBP-205	2,3,3',4,4',5,5',6-Octachloro[$^{13}C_{12}$]biphenyl	1.2 ml / 50 µg/ml
確 MBP-206	2,2',3,3',4,4',5,5',6-Nonachloro[$^{13}C_{12}$]biphenyl	1.2 ml / 50 µg/ml
確 MBP-208	2,2',3,3',4,5,5',6,6'-Nonachloro[$^{13}C_{12}$]biphenyl	1.2 ml / 50 µg/ml
確 MBP-209	Decachloro[$^{13}C_{12}$]biphenyl	1.2 ml / 50 µg/ml

MASS-LABELLED PCBs: SOLUTION/MIXTURES

Support Solutions for **PCB-CVS-A10** and **PCB-CVS-A5**

Catalogue Number	Product (nonane solution)	Qty/Conc
確 **PCB-LCS-A**	Mass-Labelled PCB Solution/Mixture	1.2 ml
確 **PCB-LCS-A1**	Mass-Labelled PCB Solution/Mixture	1.2 ml
確 **PCB-LCS-A200**	Mass-Labelled PCB Solution/Mixture	1.2 ml
確 **PCB-LCS-A100**	Mass-Labelled PCB Solution/Mixture	1.2 ml
確 **PCB-LCS-A20**	Mass-Labelled PCB Solution/Mixture	1.2 ml

Mass-Labelled PCB CONGENERS	***IUPAC***	**PCB-LCS-A** (ng/ml)	**PCB-LCS-A1** (ng/ml)	**PCB-LCS-A200** (ng/ml)	**PCB-LCS-A100** (ng/ml)	**PCB-LCS-A20** (ng/ml)
3,3',4,4'-Tetrachloro[$^{13}C_{12}$]biphenyl	*77L*	2000	1000	200	100	20
3,4,4',5-Tetrachloro[$^{13}C_{12}$]biphenyl	*81L*	2000	1000	200	100	20
2,3,3',4,4'-Pentachloro[$^{13}C_{12}$]biphenyl	*105L*	2000	1000	200	100	20
2,3,4,4',5-Pentachloro[$^{13}C_{12}$]biphenyl	*114L*	2000	1000	200	100	20
2,3',4,4',5-Pentachloro[$^{13}C_{12}$]biphenyl	*118L*	2000	1000	200	100	20
2',3,4,4',5-Pentachloro[$^{13}C_{12}$]biphenyl	*123L*	2000	1000	200	100	20
3,3',4,4',5-Pentachloro[$^{13}C_{12}$]biphenyl	*126L*	2000	1000	200	100	20
2,3,3',4,4',5-Hexachloro[$^{13}C_{12}$]biphenyl	*156L*	2000	1000	200	100	20
2,3,3',4,4',5'-Hexachloro[$^{13}C_{12}$]biphenyl	*157L*	2000	1000	200	100	20
2,3',4,4',5,5'-Hexachloro[$^{13}C_{12}$]biphenyl	*167L*	2000	1000	200	100	20
3,3',4,4',5,5'-Hexachloro[$^{13}C_{12}$]biphenyl	*169L*	2000	1000	200	100	20
2,2',3,3',4,4',5-Heptachloro[$^{13}C_{12}$]biphenyl	*170L*	2000	1000	200	100	20
2,2',3,4,4',5,5'-Heptachloro[$^{13}C_{12}$]biphenyl	*180L*	2000	1000	200	100	20
2,3,3',4,4',5,5'-Heptachloro[$^{13}C_{12}$]biphenyl	*189L*	2000	1000	200	100	20

確 **PCB-IS-A**	Mass-Labelled PCB Solution	1.2 ml
確 **PCB-IS-A100**	Mass-Labelled PCB Solution	1.2 ml
確 **PCB-IS-A20**	Mass-Labelled PCB Solution	1.2 ml

Mass-Labelled PCB CONGENER	***IUPAC***	**PCB-IS-A** (ng/ml)	**PCB-IS-A100** (ng/ml)	**PCB-IS-A20** (ng/ml)
2,3',4',5-Tetrachloro[$^{13}C_{12}$]biphenyl	*70L*	1000	100	20

確 **PCB-IS-B**	Mass-Labelled PCB Solution	1.2 ml
確 **PCB-IS-B100**	Mass-Labelled PCB Solution	1.2 ml
確 **PCB-IS-B20**	Mass-Labelled PCB Solution	1.2 ml

Mass-Labelled PCB CONGENERS	***IUPAC***	**PCB-IS-B** (ng/ml)	**PCB-IS-B100** (ng/ml)	**PCB-IS-B20** (ng/ml)
2,3',4',5-Tetrachloro[$^{13}C_{12}$]biphenyl	*70L*	1000	100	20
2,3,3',5,5'-Pentachloro[$^{13}C_{12}$]biphenyl	*111L*	1000	100	20
2,2',3,4,4',5'-Hexachloro[$^{13}C_{12}$]biphenyl	*138L*	1000	100	20

確 **PCB-IS-C**	Mass-Labelled PCB Solution	1.2 ml
確 **PCB-IS-C100**	Mass-Labelled PCB Solution	1.2 ml
確 **PCB-IS-C20**	Mass-Labelled PCB Solution	1.2 ml

Mass-Labelled PCB CONGENERS	***IUPAC***	**PCB-IS-C** (ng/ml)	**PCB-IS-C100** (ng/ml)	**PCB-IS-C20** (ng/ml)
2,3',4',5-Tetrachloro[$^{13}C_{12}$]biphenyl	*70L*	1000	100	20
2,3,3',5,5'-Pentachloro[$^{13}C_{12}$]biphenyl	*111L*	1000	100	20
2,2',3,4,4',5'-Hexachloro[$^{13}C_{12}$]biphenyl	*138L*	1000	100	20
2,2',3,3',5,5',6-Heptachloro[$^{13}C_{12}$]biphenyl	*178L*	1000	100	20

確 **PCB-SS-A**	Mass-Labelled PCB Solution	1.2 ml
確 **PCB-SS-A100**	Mass-Labelled PCB Solution	1.2 ml
確 **PCB-SS-A20**	Mass-Labelled PCB Solution	1.2 ml

Mass-Labelled PCB CONGENER	***IUPAC***	**PCB-SS-A** (ng/ml)	**PCB-SS-A100** (ng/ml)	**PCB-SS-A20** (ng/ml)
3,3',4,5'-Tetrachloro[$^{13}C_{12}$]biphenyl	*79L*	1000	100	20

確 第一種特定化学物質

Support solutions for **PCB-CVS-A10** and **PCB-CVS-A5**

Catalogue Number	Product (nonane solution)	Qty/Conc
確 PCB-ST-A	Native PCB Solution	1.2 ml
確 PCB-ST-A10	Native PCB Solution	1.2 ml
確 PCB-ST-A2	Native PCB Solution	1.2 ml
確 PCB-ST-C20	Native PCB Solution	1.2 ml

Mass-Labelled PCB CONGENERS	*IUPAC*	PCB-ST-A (ng/ml)	PCB-ST-A10 (ng/ml)	PCB-ST-A2 (ng/ml)	PCB-ST-C20 (ng/ml)
3,3',4,4'-Tetrachlorobiphenyl	*77*	2000	10	2	20
3,4,4',5-Tetrachlorobiphenyl	*81*	2000	10	2	20
2,3,3',4,4'-Pentachlorobiphenyl	*105*	2000	10	2	20
2,3,4,4',5-Pentachlorobiphenyl	*114*	2000	10	2	20
2,3',4,4',5-Pentachlorobiphenyl	*118*	2000	10	2	20
2',3,4,4',5-Pentachlorobiphenyl	*123*	2000	10	2	20
3,3',4,4',5-Pentachlorobiphenyl	*126*	2000	10	2	20
2,3,3',4,4',5-Hexachlorobiphenyl	*156*	2000	10	2	20
2,3,3',4,4',5'-Hexachlorobiphenyl	*157*	2000	10	2	20
2,3',4,4',5,5'-Hexachlorobiphenyl	*167*	2000	10	2	20
3,3',4,4',5,5'-Hexachlorobiphenyl	*169*	2000	10	2	20
2,2',3,3',4,4',5-Heptachlorobiphenyl	*170*	2000	10	2	20
2,2',3,4,4',5,5'-Heptachlorobiphenyl	*180*	2000	10	2	20
2,3,3',4,4',5,5'-Heptachlorobiphenyl	*189*	2000	10	2	20

NOTE AND NEW PRODUCTS

In order to keep up-to-date on new releases from Wellington Laboratories Japan Inc., please visit our web-site at www.well-labs.co.jp.

New Products are announced in the News & Information.

Total PCBs 標準液

Calibration Solutions

Total PCBs Mixture

Support Solutions

Mass-Labelled PCBs Solution/Mixture
Native PCBs Solution/Mixture

TPCB-CVS-A

Catalogue Number	Product (nonane solution)	Qty/Conc
確 TPCB-CVS-A	Calibration Solution for HRGC/HRMS Analysis Polychlorinated Biphenyls (PCBs)	1Kit (5×200 µl ampoules)
確 TPCB-CSL-A	CSL	200 µl
確 TPCB-CS1-A	CS1	200 µl
確 TPCB-CS2-A	CS2	200 µl
確 TPCB-CS3-A	CS3	200 µl
確 TPCB-CS4-A	CS4	200 µl
確 TPCB-CS5-A	CS5	200 µl

		CSL-A (ng/ml)	CS1-A (ng/ml)	CS2-A (ng/ml)	CS3-A (ng/ml)	CS4-A (ng/ml)	CS5-A (ng/ml)
NATIVE CHLORINATED BIPHENYLS							
CHLOROBIPHENYLS							
1, 3		0.4	2	10	50	200	1000
DICHLOROBIPHENYLS							
4, 8, 10, 11, 12, 15		0.4	2	10	50	200	1000
TRICHLOROBIPHENYLS							
18, 19, 28, 31, 33, 35, 37, 38		0.2	1	5	25	100	500
TETRACHLOROBIPHENYLS							
44, 47, 49, 52, 54, 57, 66, 70, 74, 77, 78, 79, 81		0.2	1	5	25	100	500
PENTACHLOROBIPHENYLS							
87, 95, 99, 101, 104, 105, 110, 114, 118, 123, 126		0.2	1	5	25	100	500
HEXACHLOROBIPHENYLS							
138, 149, 153, 155, 156, 157, 162, 167, 169		0.2	1	5	25	100	500
HEPTACHLOROBIPHENYLS							
170, 174, 180, 187, 188, 189		0.2	1	5	25	100	500
OCTACHLOROBIPHENYLS							
194, 195, 199, 202, 203, 205		0.4	2	10	50	200	1000
NONACHLOROBIPHENYLS							
206, 208		0.4	2	10	50	200	1000
DECACHLOROBIPHENYL							
209		0.4	2	10	50	200	1000
MASS-LABELLED CHLORINATED BIPHENYLS							
EXTRACTION STANDARDS							
4-Chloro[$^{13}C_{12}$]biphenyl ☆☆	***3L***	50	50	50	50	50	50
2,4'-Dichloro[$^{13}C_{12}$]biphenyl ☆☆	***8L***	50	50	50	50	50	50
3,3'-Dichloro[$^{13}C_{12}$]biphenyl	***11L***	50	50	50	50	50	50
2,4,4'-Trichloro[$^{13}C_{12}$]biphenyl ☆☆	***28L***	25	25	25	25	25	25
2,4',5-Trichloro[$^{13}C_{12}$]biphenyl	***31L***	25	25	25	25	25	25
2,2',5,5'-Tetrachloro[$^{13}C_{12}$]biphenyl ☆☆	***52L***	25	25	25	25	25	25
2,2',4,5,5'-Pentachloro[$^{13}C_{12}$]biphenyl ☆☆	***101L***	25	25	25	25	25	25
2,3',4,4',5-Pentachloro[$^{13}C_{12}$]biphenyl ★★ ☆☆	***118L***	25	25	25	25	25	25
2,2',3,4,4',5'-Hexachloro[$^{13}C_{12}$]biphenyl ☆☆	***138L***	25	25	25	25	25	25
2,2',4,4',5,5'-Hexachloro[$^{13}C_{12}$]biphenyl ☆☆	***153L***	25	25	25	25	25	25
2,2',3,4,4',5,5'-Heptachloro[$^{13}C_{12}$]biphenyl ★★★ ☆☆	***180L***	25	25	25	25	25	25
2,2',3,3',4,4',5,5'-Octachloro[$^{13}C_{12}$]biphenyl ☆☆	***194L***	50	50	50	50	50	50
2,2',3,3',4,4',5,5',6,-Nonachloro[$^{13}C_{12}$]biphenyl ☆☆	***206L***	50	50	50	50	50	50
2,2',3,3',4,4',5,5',6,6'-Decachloro[$^{13}C_{12}$]biphenyl ☆☆	***209L***	50	50	50	50	50	50
3,3',4,4'-Tetrachloro[$^{13}C_{12}$]biphenyl ★	***77L***	25	25	25	25	25	25
3,4,4',5-Tetrachloro[$^{13}C_{12}$]biphenyl ★	***81L***	25	25	25	25	25	25
2,3,3',4,4'-Pentachloro[$^{13}C_{12}$]biphenyl ★★	***105L***	25	25	25	25	25	25
2,3,4,4',5-Pentachloro[$^{13}C_{12}$]biphenyl ★★	***114L***	25	25	25	25	25	25
2',3,4,4',5-Pentachloro[$^{13}C_{12}$]biphenyl ★★	***123L***	25	25	25	25	25	25
3,3',4,4',5-Pentachloro[$^{13}C_{12}$]biphenyl ★	***126L***	25	25	25	25	25	25
2,3,3',4,4',5-Hexachloro[$^{13}C_{12}$]biphenyl ★★	***156L***	25	25	25	25	25	25
2,3,3',4,4',5'-Hexachloro[$^{13}C_{12}$]biphenyl ★★	***157L***	25	25	25	25	25	25
2,3',4,4',5,5'-Hexachloro[$^{13}C_{12}$]biphenyl ★★	***167L***	25	25	25	25	25	25
3,3',4,4',5,5'-Hexachloro[$^{13}C_{12}$]biphenyl ★	***169L***	25	25	25	25	25	25
2,2',3,3',4,4',5-Heptachloro[$^{13}C_{12}$]biphenyl ★★★	***170L***	25	25	25	25	25	25
2,3,3',4,4',5,5'-Heptachloro[$^{13}C_{12}$]biphenyl ★★	***189L***	25	25	25	25	25	25
RECOVERY/INTERNAL STANDARDS							
2,5-Dichloro[$^{13}C_{12}$]biphenyl	***9L***	50	50	50	50	50	50
2,2',6-Trichloro[$^{13}C_{12}$]biphenyl	***19L***	25	25	25	25	25	25
2,3',4',5-Tetrachloro[$^{13}C_{12}$]biphenyl	***70L***	25	25	25	25	25	25
2,3,3',5,5'-Pentachloro[$^{13}C_{12}$]biphenyl	***111L***	25	25	25	25	25	25
2,3,3',4',5,5'-Hexachloro[$^{13}C_{12}$]biphenyl	***162L***	25	25	25	25	25	25
2,2',3,3',5,5',6-Heptachloro[$^{13}C_{12}$]biphenyl	***178L***	25	25	25	25	25	25
2,3,3',4,4',5,5',6-Octachloro[$^{13}C_{12}$]biphenyl	***205L***	50	50	50	50	50	50
SAMPLING/CLEANUP STANDARDS							
2,2'-Dichloro[$^{13}C_{12}$]biphenyl	***4L***	50	50	50	50	50	50
3,3',4,5'-Tetrachloro[$^{13}C_{12}$]biphenyl	***79L***	25	25	25	25	25	25

★ non-ortho-PCBs
★★ mono-ortho-PCBs
★★★ di-ortho-PCBs
☆☆ 厚生省告示192

確 第一種特定化学物質

Catalogue Number	Product (nonane solution)	Qty/Conc
確 TPCB-LCS-A100		1.2 ml
確 TPCB-LCS-A25		1.2 ml
確 TPCB-LCS-B100		1.2 ml
確 TPCB-LCS-B25		1.2 ml

		TPCB-LCS-A100 (ng/ml)	TPCB-LCS-A25 (ng/ml)	TPCB-LCS-B100 (ng/ml)	TPCB-LCS-B25 (ng/ml)
4-Chloro[$^{13}C_{12}$]biphenyl ☆☆	*3L*	200	50	200	50
2,4'-Dichloro[$^{13}C_{12}$]biphenyl ☆☆	*8L*	200	50	200	50
3,3'-Dichloro[$^{13}C_{12}$]biphenyl	*11L*	200	50	200	50
2,4,4'-Trichloro[$^{13}C_{12}$]biphenyl ☆☆	*28L*	100	25	100	25
2,4',5-Trichloro[$^{13}C_{12}$]biphenyl	*31L*	100	25	100	25
2,2',5,5'-Tetrachloro[$^{13}C_{12}$]biphenyl ☆☆	*52L*	100	25	100	25
2,2',4,5,5'-Pentachloro[$^{13}C_{12}$]biphenyl ☆☆	*101L*	100	25	100	25
2,3',4,4',5-Pentachloro[$^{13}C_{12}$]biphenyl ★★ ☆☆	*118L*	100	25	100	25
252,2',3,4,4',5'-Hexachloro[$^{13}C_{12}$]biphenyl ☆☆	*138L*	100	25	100	25
2,2',4,4',5,5'-Hexachloro[$^{13}C_{12}$]biphenyl ☆☆	*153L*	100	25	100	25
2,2',3,4,4',5,5'-Heptachloro[$^{13}C_{12}$]biphenyl ★★★ ☆☆	*180L*	100	25	100	25
2,2',3,3',4,4',5,5'-Octachloro[$^{13}C_{12}$]biphenyl ☆☆	*194L*	200	50	200	50
2,2',3,3',4,4',5,5',6,-Nonachloro[$^{13}C_{12}$]biphenyl ☆☆	*206L*	200	50	200	50
2,2',3,3',4,4',5,5',6,6'-Decachloro[$^{13}C_{12}$]biphenyl ☆☆	*209L*	200	50	200	50
3,3',4,4'-Tetrachloro[$^{13}C_{12}$]biphenyl ★	*77L*	100	25		
3,4,4',5-Tetrachloro[$^{13}C_{12}$]biphenyl ★	*81L*	100	25		
2,3,3',4,4'-Pentachloro[$^{13}C_{12}$]biphenyl ★★	*105L*	100	25		
2,3,4,4',5-Pentachloro[$^{13}C_{12}$]biphenyl ★★	*114L*	100	25		
2',3,4,4',5-Pentachloro[$^{13}C_{12}$]biphenyl ★★	*123L*	100	25		
3,3',4,4',5-Pentachloro[$^{13}C_{12}$]biphenyl ★	*126L*	100	25		
2,3,3',4,4',5-Hexachloro[$^{13}C_{12}$]biphenyl ★★	*156L*	100	25		
2,3,3',4,4',5'-Hexachloro[$^{13}C_{12}$]biphenyl ★★	*157L*	100	25		
2,3',4,4',5,5'-Hexachloro[$^{13}C_{12}$]biphenyl ★★	*167L*	100	25		
3,3',4,4',5,5'-Hexachloro[$^{13}C_{12}$]biphenyl ★	*169L*	100	25		
2,2',3,3',4,4',5-Heptachloro[$^{13}C_{12}$]biphenyl ★★★	*170L*	100	25		
2,3,3',4,4',5,5'-Heptachloro[$^{13}C_{12}$]biphenyl ★★	*189L*	100	25		

確 TPCB-IS-A100		1.2 ml
確 TPCB-IS-A25		1.2 ml

		TPCB-IS-A100 (ng/ml)	TPCB-IS-A25 (ng/ml)
2,5-Dichloro[$^{13}C_{12}$]biphenyl	*9L*	200	50
2,2',6-Trichloro[$^{13}C_{12}$]biphenyl	*19L*	100	25
2,3',4',5-Tetrachloro[$^{13}C_{12}$]biphenyl	*70L*	100	25
2,3,3',5,5'-Pentachloro[$^{13}C_{12}$]biphenyl	*111L*	100	25
2,3,3',4',5,5'-Hexachloro[$^{13}C_{12}$]biphenyl	*162L*	100	25
2,2',3,3',5,5',6-Heptachloro[$^{13}C_{12}$]biphenyl	*178L*	100	25
2,3,3',4,4',5,5',6-Octachloro[$^{13}C_{12}$]biphenyl	*205L*	200	50

確 TPCB-SS-A100		1.2 ml
確 TPCB-SS-A25		1.2 ml

		TPCB-SS-A100 (ng/ml)	TPCB-SS-A25 (ng/ml)
2,2'-Dichloro[$^{13}C_{12}$]biphenyl	*4L*	200	50
3,3',4,5'-Tetrachloro[$^{13}C_{12}$]biphenyl	*79L*	100	25

OIL-CVS-B

Catalogue Number	Product (nonane solution)	Qty/Conc
確 OIL-CVS-B *簡易定量法 2.2 2.3 2.4 対応	CS1-B/CS2-B/CS3-B/CS4-B/CS5-B/CS6-B	1Kit (6×200 µl ampoules)
確 OIL-CS1-B	CS1	200 µl
確 OIL-CS2-B	CS2	200 µl
確 OIL-CS3-B	CS3	200 µl
確 OIL-CS4-B	CS4	200 µl
確 OIL-CS5-B	CS5	200 µl
確 OIL-CS6-B	CS6	200 µl

Native PCB Congeners	*IUPAC*	CS1-B (ng/ml)	CS2-B (ng/ml)	CS3-B (ng/ml)	CS4-B (ng/ml)	CS5-B (ng/ml)	CS6-B (ng/ml)
4-Chlorobiphenyl	*3*	0.5	2	10	40	200	1000
2,4'-Dichlorobiphenyl	*8*	0.5	2	10	40	200	1000
2,4,4'-Trichlorobiphenyl	*28*	0.5	2	10	40	200	1000
2,2',5,5'-Tetrachlorobiphenyl	*52*	0.5	2	10	40	200	1000
2,2',4,5,5'-Pentachlorobiphenyl	*101*	0.5	2	10	40	200	1000
2,3'4,4',5-Pentachlorobiphenyl	*118*	0.5	2	10	40	200	1000
2,2',3,4,4',5'-Hexachlorobiphenyl	*138*	0.5	2	10	40	200	1000
2,2',4,4',5,5'-Hexachlorobiphenyl	*153*	0.5	2	10	40	200	1000
2,2',3,4,4',5,5'-Heptachlorobiphenyl	*180*	0.5	2	10	40	200	1000
2,2',3,3',4,4',5,5'-Octachlorobiphenyl	*194*	0.5	2	10	40	200	1000
2,2',3,3',4,4',5,5',6-Nonachlorobiphenyl	*206*	0.5	2	10	40	200	1000
Decachlorobiphenyl	*209*	0.5	2	10	40	200	1000
Mass-Labelled PCB Congeners	***IUPAC***						
4-Chloro[$^{13}C_{12}$]biphenyl	*3L*	40	40	40	40	40	40
2,4'-Dichloro[$^{13}C_{12}$]biphenyl	*8L*	40	40	40	40	40	40
2,4,4'-Trichloro[$^{13}C_{12}$]biphenyl	*28L*	40	40	40	40	40	40
2,2',5,5'-Tetrachloro[$^{13}C_{12}$]biphenyl	*52L*	40	40	40	40	40	40
2,2',4,5,5'-Pentachloro[$^{13}C_{12}$]biphenyl	*101L*	40	40	40	40	40	40
2,3'4,4',5-Pentachloro[$^{13}C_{12}$]biphenyl	*118L*	40	40	40	40	40	40
2,2',3,4,4',5'-Hexachloro[$^{13}C_{12}$]biphenyl	*138L*	40	40	40	40	40	40
2,2',4,4',5,5'-Hexachloro[$^{13}C_{12}$]biphenyl	*153L*	40	40	40	40	40	40
2,2',3,4,4',5,5'-Heptachloro[$^{13}C_{12}$]biphenyl	*180L*	40	40	40	40	40	40
2,2',3,3',4,4',5,5'-Octachloro[$^{13}C_{12}$]biphenyl	*194L*	40	40	40	40	40	40
2,2',3,3',4,4',5,5',6-Nonachloro[$^{13}C_{12}$]biphenyl	*206L*	40	40	40	40	40	40
Decachloro[$^{13}C_{12}$]biphenyl	*209L*	40	40	40	40	40	40

確 第一種特定化学物質

Catalogue Number	Product (nonane solution)	Qty/Conc
確 **MBP-MXP** *簡易定量法 2.2 2.3 2.4 対応	Mass-Labelled PCB Internal Standard Solution	1.2 ml

Mass-Labelled PCB Congeners	*IUPAC*	MBP-MXP (ng/ml)
4-Chloro[$^{13}C_{12}$]biphenyl	*3L*	500
2,4'-Dichloro[$^{13}C_{12}$]biphenyl	*8L*	500
2,4,4'-Trichloro[$^{13}C_{12}$]biphenyl	*28L*	500
2,2',5,5'-Tetrachloro[$^{13}C_{12}$]biphenyl	*52L*	500
2,2',4,5,5'-Pentachloro[$^{13}C_{12}$]biphenyl	*101L*	500
2,3'4,4',5-Pentachloro[$^{13}C_{12}$]biphenyl	*118L*	500
2,2',3,4,4',5'-Hexachloro[$^{13}C_{12}$]biphenyl	*138L*	500
2,2',4,4',5,5'-Hexachloro[$^{13}C_{12}$]biphenyl	*153L*	500
2,2',3,4,4',5,5'-Heptachloro[$^{13}C_{12}$]biphenyl	*180L*	500
2,2',3,3',4,4',5,5'-Octachloro[$^{13}C_{12}$]biphenyl	*194L*	500
2,2',3,3',4,4',5,5',6-Nonachloro[$^{13}C_{12}$]biphenyl	*206L*	500
Decachloro[$^{13}C_{12}$]biphenyl	*209L*	500

確 **P48-M-ES** *簡易定量法 2.5 対応	Mass-Labelled PCB Internal Standard Solution	1.2 ml

Mass-Labelled PCB Congeners	*IUPAC*	P48-M-ES (ng/ml)
2,4,4'-Trichloro[$^{13}C_{12}$]biphenyl	*28L*	1000
2,2',5,5'-Tetrachloro[$^{13}C_{12}$]biphenyl	*52L*	1000
2,2',4,5,5'-Pentachloro[$^{13}C_{12}$]biphenyl	*101L*	1000
2,2',3,4,4',5'-Hexachloro[$^{13}C_{12}$]biphenyl	*138L*	1000
2,2',4,4',5,5'-Hexachloro[$^{13}C_{12}$]biphenyl	*153L*	1000
2,2',3,4,4',5,5'-Heptachloro[$^{13}C_{12}$]biphenyl	*180L*	1000

確 **P48-RS-STK** *簡易定量法 2.5 対応	Mass-Labelled PCB Internal Standard Solution	1.2 ml

Mass-Labelled PCB Congeners	*IUPAC*	P-48-RS-STK (ng/ml)
2,3',4',5-Tetrachloro[$^{13}C_{12}$]biphenyl	*70L*	1000
2,3,3',5,5'-Pentachloro[$^{13}C_{12}$]biphenyl	*111L*	1000
2,2',3,3',4,4',5,-Heptachloro[$^{13}C_{12}$]biphenyl	*170L*	1000

確 **MBP-CG**	Mass-Labelled Mono To Decachloro PCB Solution/Mixture	1.2 ml

Mass-Labelled PCB Congeners	*IUPAC*	MBP-CG (ng/ml)
4-Chloro[$^{13}C_{12}$]biphenyl	*3L*	5000
4,4'-Dichloro[$^{13}C_{12}$]biphenyl	*15L*	5000
2,4',5-Trichloro[$^{13}C_{12}$]biphenyl	*31L*	5000
2,2',5,5'-Tetrachloro[$^{13}C_{12}$]biphenyl	*52L*	5000
2,3',4,4',5-Chloro[$^{13}C_{12}$]biphenyl	*118L*	5000
2,2',4,4',5,5'-Hexachloro[$^{13}C_{12}$]biphenyl	*153L*	5000
2,2',3,4,4',5,5'-Heptachloro[$^{13}C_{12}$]biphenyl	*180L*	5000
2,2',3,3',4,4',5,5'-Octachloro[$^{13}C_{12}$]biphenyl	*194L*	5000
2,2',3,3',4,4',5,5',6-Nonachloro[$^{13}C_{12}$]biphenyl	*206L*	5000
Decachloro[$^{13}C_{12}$]biphenyl	*209L*	5000

PCB-CVS-H

Catalogue Number	Product (nonane solution)	Qty/Conc
確 PCB-CVS-H	Calibration Solution for HRGC/HRMS Analysis Polychlorinated Biphenyls (PCBs)	1Kit (6×200 µl ampoules)
確 PCB-CS1-H	CS1	200 µl
確 PCB-CS2-H	CS2	200 µl
確 PCB-CS3-H	CS3	200 µl
確 PCB-CS4-H	CS4	200 µl
確 PCB-CS5-H	CS5	200 µl
確 PCB-CS6-H	CS6	200 µl

		PCB-CS1-H (ng/ml)	PCB-CS2-H (ng/ml)	PCB-CS3-H (ng/ml)	PCB-CS4-H (ng/ml)	PCB-CS5-H (ng/ml)	PCB-CS6-H (ng/ml)
NATIVE CHLORINATED BIPHENYLS							
CHLOROBIPHENYLS							
1, 3		0.1	0.5	2.0	10	40	200
DICHLOROBIPHENYLS							
4, 6, 8, 10, 15		0.1	0.5	2.0	10	40	200
TRICHLOROBIPHENYLS							
16, 18, 19, 22, 28, 31, 33, 37		0.1	0.5	2.0	10	40	200
TETRACHLOROBIPHENYLS							
40, 41, 44, 49, 52, 54, 60, 66, 70, 74, 77, 81		0.1	0.5	2.0	10	40	200
PENTACHLOROBIPHENYLS							
84, 85, 87, 90, 95, 97, 99, 101, 104, 105, 110, 114, 118, 119, 123, 126		0.1	0.5	2.0	10	40	200
HEXACHLOROBIPHENYLS							
128, 129, 135, 137, 138, 141, 149, 151, 153, 155, 156, 157, 158, 167, 168, 169		0.1	0.5	2.0	10	40	200
HEPTACHLOROBIPHENYLS							
170, 171, 174, 177, 178, 180, 183, 187, 188, 189, 191, 193		0.1	0.5	2.0	10	40	200
OCTACHLOROBIPHENYLS							
194, 199, 200, 201, 202, 203, 205		0.1	0.5	2.0	10	40	200
NONACHLOROBIPHENYLS							
206, 207, 208		0.1	0.5	2.0	10	40	200
DECACHLOROBIPHENYL							
209		0.1	0.5	2.0	10	40	200
MASS-LABELLED CHLORINATED BIPHENYLS							
EXTRACTION STANDARDS							
2-Chloro[$^{13}C_{12}$]biphenyl	***1L***	50	50	50	50	50	50
4-Chloro[$^{13}C_{12}$]biphenyl	***3L***	50	50	50	50	50	50
2,2'-Dichloro[$^{13}C_{12}$]biphenyl	***4L***	50	50	50	50	50	50
2,4'-Dichloro[$^{13}C_{12}$]biphenyl	***8L***	50	50	50	50	50	50
4,4'-Dichloro[$^{13}C_{12}$]biphenyl	***15L***	50	50	50	50	50	50
2,2',6-Trichloro[$^{13}C_{12}$]biphenyl	***19L***	50	50	50	50	50	50
2,4,4'-Trichloro[$^{13}C_{12}$]biphenyl	***28L***	50	50	50	50	50	50
2,2',5,5'-Tetrachloro[$^{13}C_{12}$]biphenyl	***52L***	50	50	50	50	50	50
2,2',6,6'-Tetrachloro[$^{13}C_{12}$]biphenyl	***54L***	50	50	50	50	50	50
2,3',4',5-Tetrachloro[$^{13}C_{12}$]biphenyl	***70L***	50	50	50	50	50	50
3,3',4,4'-Tetrachloro[$^{13}C_{12}$]biphenyl	***77L***	50	50	50	50	50	50
3,4,4',5-Tetrachloro[$^{13}C_{12}$]biphenyl	***81L***	50	50	50	50	50	50
2,2',3,5',6-Pentachloro[$^{13}C_{12}$]biphenyl	***95L***	50	50	50	50	50	50
2,2',4,5,5'-Pentachloro[$^{13}C_{12}$]biphenyl	***101L***	50	50	50	50	50	50
2,2',4,6,6'-Pentachloro[$^{13}C_{12}$]biphenyl	***104L***	50	50	50	50	50	50
2,3,3',4,4'-Pentachloro[$^{13}C_{12}$]biphenyl	***105L***	50	50	50	50	50	50
2,3,4,4'5-Pentachloro[$^{13}C_{12}$]biphenyl	***114L***	50	50	50	50	50	50
2,3',4,4',5-Pentachloro[$^{13}C_{12}$]biphenyl	***118L***	50	50	50	50	50	50
2',3,4,4',5-Pentachloro[$^{13}C_{12}$]biphenyl	***123L***	50	50	50	50	50	50
3,3',4,4',5-Pentachloro[$^{13}C_{12}$]biphenyl	***126L***	50	50	50	50	50	50
2,2',3,4,5,5'-Hexachloro[$^{13}C_{12}$]biphenyl	***138L***	50	50	50	50	50	50
2,2',4,4',5,5'-Hexachloro[$^{13}C_{12}$]biphenyl	***153L***	50	50	50	50	50	50
2,2',4,4',6,6'-Hexachloro[$^{13}C_{12}$]biphenyl	***155L***	50	50	50	50	50	50
2,3,3',4,4',5-Hexachloro[$^{13}C_{12}$]biphenyl	***156L***	50	50	50	50	50	50
2,3,3',4,4',5'-Hexachloro[$^{13}C_{12}$]biphenyl	***157L***	50	50	50	50	50	50
2,3',4,4',5,5'-Hexachloro[$^{13}C_{12}$]biphenyl	***167L***	50	50	50	50	50	50
3,3',4,4',5,5'-Hexachloro[$^{13}C_{12}$]biphenyl	***169L***	50	50	50	50	50	50
2,2',3,3',4,4',5-Heptachloro[$^{13}C_{12}$]biphenyl	***170L***	50	50	50	50	50	50
2,2',3,4,4',5,5'-Heptachloro[$^{13}C_{12}$]biphenyl	***180L***	50	50	50	50	50	50
2,2',3,4',5,6,6'-Heptachloro[$^{13}C_{12}$]biphenyl	***188L***	50	50	50	50	50	50
2,3,3',4,4',5,5'-Heptachloro[$^{13}C_{12}$]biphenyl	***189L***	50	50	50	50	50	50
2,2',3,3',5,5',6,6'-Octachloro[$^{13}C_{12}$]biphenyl	***202L***	50	50	50	50	50	50
2,3,3',4,4',5,5',6-Octachloro[$^{13}C_{12}$]biphenyl	***205L***	50	50	50	50	50	50
2,2',3,3',4,5,5',6,6'-Nonachloro[$^{13}C_{12}$]biphenyl	***208L***	50	50	50	50	50	50
Decachloro[$^{13}C_{12}$]biphenyl	***209L***	50	50	50	50	50	50
RECOVERY/INTERNAL STANDARDS							
2,5-Dichloro[$^{13}C_{12}$]biphenyl	***9L***	50	50	50	50	50	50
3,4,4'-Trichloro[$^{13}C_{12}$]biphenyl	***37L***	50	50	50	50	50	50
3,3',4,5'-Tetrachloro[$^{13}C_{12}$]biphenyl	***79L***	50	50	50	50	50	50
2,3,3',5,5'-Pentachloro[$^{13}C_{12}$]biphenyl	***111L***	50	50	50	50	50	50
2,3,3',4',5,5'-Hexachloro[$^{13}C_{12}$]biphenyl	***162L***	50	50	50	50	50	50
2,2',3,3',4,4',5,5'-Octachloro[$^{13}C_{12}$]biphenyl	***194L***	50	50	50	50	50	50
2,2',3,3',4,4',5,5',6-Nonachloro[$^{13}C_{12}$]biphenyl	***206L***	50	50	50	50	50	50
SAMPLING/CLEANUP STANDARDS							
2,3,4,4'-Tetrachloro[$^{13}C_{12}$]biphenyl	***60L***	50	50	50	50	50	50
2,3,3',4,5,5'-Hexachloro[$^{13}C_{12}$]biphenyl	***159L***	50	50	50	50	50	50

確 第一種特定化学物質

SUPPORT SOLUTION FOR PCB-CVS-H

Catalogue Number	Product (nonane solution)	Qty/Conc
確 PCB-LCS-H	Mass-Labelled PCB Extraction Standards	1.2 ml
確 PCB-ISS-H	Mass-Labelled PCB Internal/Recovery Standards	1.2 ml
確 PCB-SCS-H	Mass-Labelled PCB Cleanup/Sampling Standards	1.2 ml
確 PCB-PAR-H	Native PCB Solution	1.2 ml

		PCB-LCS-H (ng/ml)	PCB-ISS-H (ng/ml)	PCB-SCS-H (ng/ml)	PCB-PAR-H (ng/ml)
NATIVE CHLORINATED BIPHENYLS					
CHLOROBIPHENYLS					
1, 3		—	—	—	500
DICHLOROBIPHENYLS					
4, 6, 8, 10, 15		—	—	—	500
TRICHLOROBIPHENYLS					
16, 18, 19, 22, 28, 31, 33, 37		—	—	—	500
TETRACHLOROBIPHENYLS					
40, 41, 44, 49, 52, 54, 60, 66, 70, 74, 77, 81		—	—	—	500
PENTACHLOROBIPHENYLS					
84, 85, 87, 90, 95, 97, 99, 101, 104, 105, 110, 114, 118, 119, 123, 126		—	—	—	500
HEXACHLOROBIPHENYLS					
128, 129, 135, 137, 138, 141, 149, 151, 153, 155, 156, 157, 158, 167, 168, 169		—	—	—	500
HEPTACHLOROBIPHENYLS					
170, 171, 174, 177, 178, 180, 183, 187, 188, 189, 191, 193		—	—	—	500
OCTACHLOROBIPHENYLS					
194, 199, 200, 201, 202, 203, 205		—	—	—	500
NONACHLOROBIPHENYLS					
206, 207, 208		—	—	—	500
DECACHLOROBIPHENYL					
209		—	—	—	500
MASS-LABELLED CHLORINATED BIPHENYLS					
EXTRACTION STANDARDS					
2-Chloro[$^{13}C_{12}$]biphenyl	*1L*	1000	—	—	—
4-Chloro[$^{13}C_{12}$]biphenyl	*3L*	1000	—	—	—
2,2'-Dichloro[$^{13}C_{12}$]biphenyl	*4L*	1000	—	—	—
2,4'-Dichloro[$^{13}C_{12}$]biphenyl	*8L*	1000	—	—	—
4,4'-Dichloro[$^{13}C_{12}$]biphenyl	*15L*	1000	—	—	—
2,2',6-Trichloro[$^{13}C_{12}$]biphenyl	*19L*	1000	—	—	—
2,4,4'-Trichloro[$^{13}C_{12}$]biphenyl	*28L*	1000	—	—	—
2,2',5,5'-Tetrachloro[$^{13}C_{12}$]biphenyl	*52L*	1000	—	—	—
2,2',6,6'-Tetrachloro[$^{13}C_{12}$]biphenyl	*54L*	1000	—	—	—
2,3',4',5-Tetrachloro[$^{13}C_{12}$]biphenyl	*70L*	1000	—	—	—
3,3',4,4'-Tetrachloro[$^{13}C_{12}$]biphenyl	*77L*	1000	—	—	—
3,4,4',5-Tetrachloro[$^{13}C_{12}$]biphenyl	*81L*	1000	—	—	—
2,2',3,5',6-Pentachloro[$^{13}C_{12}$]biphenyl	*95L*	1000	—	—	—
2,2',4,5,5'-Pentachloro[$^{13}C_{12}$]biphenyl	*101L*	1000	—	—	—
2,2',4,6,6'-Pentachloro[$^{13}C_{12}$]biphenyl	*104L*	1000	—	—	—
2,3,3',4,4'-Pentachloro[$^{13}C_{12}$]biphenyl	*105L*	1000	—	—	—
2,3,4,4'5-Pentachloro[$^{13}C_{12}$]biphenyl	*114L*	1000	—	—	—
2,3',4,4',5-Pentachloro[$^{13}C_{12}$]biphenyl	*118L*	1000	—	—	—
2',3,4,4',5-Pentachloro[$^{13}C_{12}$]biphenyl	*123L*	1000	—	—	—
3,3',4,4',5-Pentachloro[$^{13}C_{12}$]biphenyl	*126L*	1000	—	—	—
2,2',3,4,5,5'-Hexachloro[$^{13}C_{12}$]biphenyl	*138L*	1000	—	—	—
2,2',4,4',5,5'-Hexachloro[$^{13}C_{12}$]biphenyl	*153L*	1000	—	—	—
2,2',4,4',6,6'-Hexachloro[$^{13}C_{12}$]biphenyl	*155L*	1000	—	—	—
2,3,3',4,4',5-Hexachloro[$^{13}C_{12}$]biphenyl	*156L*	1000	—	—	—
2,3,3',4,4',5'-Hexachloro[$^{13}C_{12}$]biphenyl	*157L*	1000	—	—	—
2,3',4,4',5,5'-Hexachloro[$^{13}C_{12}$]biphenyl	*167L*	1000	—	—	—
3,3',4,4',5,5'-Hexachloro[$^{13}C_{12}$]biphenyl	*169L*	1000	—	—	—
2,2',3,3',4,4',5-Heptachloro[$^{13}C_{12}$]biphenyl	*170L*	1000	—	—	—
2,2',3,4,4',5,5'-Heptachloro[$^{13}C_{12}$]biphenyl	*180L*	1000	—	—	—
2,2',3,4',5,6,6'-Heptachloro[$^{13}C_{12}$]biphenyl	*188L*	1000	—	—	—
2,3,3',4,4',5,5'-Heptachloro[$^{13}C_{12}$]biphenyl	*189L*	1000	—	—	—
2,2',3,3',5,5',6,6'-Octachloro[$^{13}C_{12}$]biphenyl	*202L*	1000	—	—	—
2,3,3',4,4',5,5',6-Octachloro[$^{13}C_{12}$]biphenyl	*205L*	1000	—	—	—
2,2',3,3',4,5,5',6,6'-Nonachloro[$^{13}C_{12}$]biphenyl	*208L*	1000	—	—	—
Decachloro[$^{13}C_{12}$]biphenyl	*209L*	1000	—	—	—
RECOVERY/INTERNAL STANDARDS					
2,5-Dichloro[$^{13}C_{12}$]biphenyl	*9L*	—	1000	—	—
3,4,4'-Trichloro[$^{13}C_{12}$]biphenyl	*37L*	—	1000	—	—
3,3',4,5'-Tetrachloro[$^{13}C_{12}$]biphenyl	*79L*	—	1000	—	—
2,3,3',5,5'-Pentachloro[$^{13}C_{12}$]biphenyl	*111L*	—	1000	—	—
2,3,3',4',5,5'-Hexachloro[$^{13}C_{12}$]biphenyl	*162L*	—	1000	—	—
2,2',3,3',4,4',5,5'-Octachloro[$^{13}C_{12}$]biphenyl	*194L*	—	1000	—	—
2,2',3,3',4,4',5,5',6-Nonachloro[$^{13}C_{12}$]biphenyl	*206L*	—	1000	—	—
SAMPLING/CLEANUP STANDARDS					
2,3,4,4'-Tetrachloro[$^{13}C_{12}$]biphenyl	*60L*	—	—	1000	—
2,3,3',4,5,5'-Hexachloro[$^{13}C_{12}$]biphenyl	*159L*	—	—	1000	—

NATIVE PCBs : SOLUTION/MIXTURES

Catalogue Number	Product (nonane solution)	Qty/Conc
確 **BP-WD** Window Defining Mixture Solution for DB-5 or Equivalent Column	Native PCB Window Defining Mixture Solution	1.2 ml
確 **BP-MXP** *簡易定量法　2.2　2.3　2.4 対応	Native PCB Mixture Solution	1.2 ml
確 **PCB-ST-D** *簡易定量法　2.5　対応	Native PCB Mixture Solution	1.2 ml

Native PCB Congeners	*IUPAC*	BP-WD (ng/ml)	BP-MXP (ng/ml)	PCB-ST-D (ng/ml)
Biphenyl	—	2500	—	—
2-Chlorobiphenyl	*1*	2500	—	—
4-Chlorobiphenyl	*3*	2500	2000	—
2,4'-Dichlorobiphenyl	*8*	—	2000	2000
2,6-Dichlorobiphenyl	*10*	2500	—	—
4,4'-Dichlorobiphenyl	*15*	2500	—	—
2,2',5-Trichlorobiphenyl	*18*	—	—	2000
2,2',6-Trichlorobiphenyl	*19*	2500	—	—
2,4,4'-Trichlorobiphenyl	*28*	—	2000	2000
3,4,4'-Trichlorobiphenyl	*37*	2500	—	—
2,2',3,5'-Tetrachlorobiphenyl	*44*	—	—	2000
2,2',5,5'-Tetrachlorobiphenyl	*52*	—	2000	2000
2,2',6,6'-Tetrachlorobiphenyl	*54*	2500	—	—
2,3',4',5-Tetrachlorobiphenyl	*70*	—	—	2000
3,3',4,4'-Tetrachlorobiphenyl	*77*	2500	—	—
2,2',4,5,5'-Pentachlorobiphenyl	*101*	—	2000	—
2,2',4,6,6'-Pentachlorobiphenyl	*104*	2500	—	—
2,3,3',4',6-Pentachlorobiphenyl	*110*	—	—	2000
2,3',4,4',5-Pentachlorobiphenyl	*118*	—	2000	2000
3,3',4,4',5-Pentachlorobiphenyl	*126*	2500	—	—
2,2',3,4,5,5'-Hexachlorobiphenyl	*138*	—	2000	2000
2,2',3,4',5',6-Hexachlorobiphenyl	*149*	—	—	2000
2,2',4,4',5,5'-Hexachlorobiphenyl	*153*	—	2000	2000
2,2',4,4',6,6'-Hexachlorobiphenyl	*155*	2500	—	—
3,3',4,4',5,5'-Hexachlorobiphenyl	*169*	2500	—	—
2,2',3,4,4',5,5'-Heptachlorobiphenyl	*180*	—	2000	2000
2,2',3,4',5,5',6-Heptachlorobiphenyl	*187*	—	—	2000
2,2',3,4',5,6,6'-Heptachlorobiphenyl	*188*	2500	—	—
2,3,3',4,4',5,5'-Heptachlorobiphenyl	*189*	2500	—	—
2,2',3,3',4,4',5,5'-Octachlorobiphenyl	*194*	—	2000	2000
2,2',3,3',5,5',6,6'-Octachlorobiphenyl	*202*	2500	—	—
2,3,3',4,4',5,5',6-Octachlorobiphenyl	*205*	2500	—	—
2,2',3,3',4,4',5,5',6-Nonachlorobiphenyl	*206*	2500	2000	—
2,2',3,3',4,5,5',6,6'-Nonachlorobiphenyl	*208*	2500	—	—
Decachlorobiphenyl	209	2500	2000	—

確 第一種特定化学物質

BP-MS-PL1, BP-MS-PL2, and **BP-MS-PL3** were prepared to be used in the identification/confirmation of the PCB congeners in **BP-MS**. Although DB-5 data is provided with **BP-MS**, there can be changes in the elution order on "*equivalent capillary columns*".

Catalogue Number	Product (nonane solution)	Qty/Conc
確 BP-MS	Native PCB Solution/Mixture for MS Detection	1.2 ml
確 BP-MS2	Native PCB Solution/Mixture for MS Detection	1.2 ml
確 BP-MS-PL1	Native PCB Solution/Mixture for MS Detection	1.2 ml
確 BP-MS-PL2	Native PCB Solution/Mixture for MS Detection	1.2 ml
確 BP-MS-PL3	Native PCB Solution/Mixture for MS Detection	1.2 ml

PCB CONGENERS	*IUPAC*	BP-MS (µg/ml)	BP-MS2 (µg/ml)	BP-MS-PL1 (µg/ml)	BP-MS-PL2 (µg/ml)	BP-MS-PL3 (µg/ml)
2-Chlorobiphenyl	*1*	2.0	—	—	—	—
4-Chlorobiphenyl	*3*	2.0	—	—	—	—
2,2'-Dichlorobiphenyl	*4*	2.0	—	—	—	—
2,4'-Dichlorobiphenyl	*8*	2.0	—	—	—	—
2,6-Dichlorobiphenyl	*10*	2.0	—	—	—	—
*4,4'-Dichlorobiphenyl	*15*	2.0	—	—	—	—
*2,2',5-Trichlorobiphenyl	*18*	2.0	—	—	—	—
2,2',6-Trichlorobiphenyl	*19*	2.0	—	—	—	—
2,3,4'-Trichlorobiphenyl	*22*	2.0	—	—	—	—
2,4,4'-Trichlorobiphenyl	*28*	2.0	—	—	—	—
2',3,4-Trichlorobiphenyl	*33*	2.0	—	—	—	—
3,4,4'-Trichlorobiphenyl	*37*	2.0	—	—	—	—
2,2',3,3'-Tetrachlorobiphenyl	*40*	—	2.0	—	—	—
2,2',3,4-Tetrachlorobiphenyl	*41*	—	2.0	—	—	—
*2,2',3,5'-Tetrachlorobiphenyl	*44*	2.0	—	—	—	—
*2,2',4,5'-Tetrachlorobiphenyl	*49*	2.0	—	—	2.0	—
*2,2',5,5'-Tetrachlorobiphenyl	*52*	2.0	—	2.0	—	—
*2,2',6,6'-Tetrachlorobiphenyl	*54*	2.0	—	—	—	—
2,3,4,4'-Tetrachlorobiphenyl	*60*	—	2.0	—	—	—
2,3',4,4',-Tetrachlorobiphenyl	*66*	—	2.0	—	—	—
2,3',4',5-Tetrachlorobiphenyl	*70*	2.0	—	2.0	—	—
2,4,4',5-Tetrachlorobiphenyl	*74*	2.0	—	—	2.0	—
*3,3',4,4'-Tetrachlorobiphenyl	*77*	2.0	—	—	—	2.0
3,4,4',5-Tetrachlorobiphenyl	*81*	2.0	—	—	—	—
*2,2',3,4,5'-Pentachlorobiphenyl	*87*	2.0	—	2.0	—	—
2,2',3,4',5-Pentachlorobiphenyl	*90*	—	2.0	—	—	—
2,2',3,5',6-Pentachlorobiphenyl	*95*	2.0	—	—	2.0	—
2,2',4,4',5-Pentachlorobiphenyl	*99*	2.0	—	—	2.0	—
*2,2',4,5,5'-Pentachlorobiphenyl	*101*	2.0	—	2.0	—	—
2,2',4,6,6'-Pentachlorobiphenyl	*104*	2.0	—	—	—	—
*2,3,3',4,4'-Pentachlorobiphenyl	*105*	2.0	—	—	—	—
2,3,3',4',6-Pentachlorobiphenyl	*110*	2.0	—	2.0	—	—
*2,3,4,4',5-Pentachlorobiphenyl	*114*	2.0	—	—	—	—
*2,3',4,4',5-Pentachlorobiphenyl	*118*	2.0	—	—	—	—
2,3',4,4',6-Pentachlorobiphenyl	*119*	2.0	—	—	—	—
2',3,4,4',5-Pentachlorobiphenyl	*123*	2.0	—	—	—	—
3,3',4,4',5-Pentachlorobiphenyl	*126*	2.0	—	—	—	—
*2,2',3,3',4,4'-Hexachlorobiphenyl	*128*	2.0	—	—	—	2.0
2,2',3,3',4,5-Hexachlorobiphenyl	*129*	—	2.0	—	—	—
2,2',3,4,4',5-Hexachlorobiphenyl	*137*	—	2.0	—	—	—
*2,2',3,4,5,5'-Hexachlorobiphenyl	*138*	2.0	—	2.0	—	—
2,2',3,4,5,5'-Hexachlorobiphenyl	*141*	—	2.0	—	—	—
2,2',3,4',5',6-Hexachlorobiphenyl	*149*	2.0	—	—	2.0	—
*2,2',3,5,5',6-Hexachlorobiphenyl	*151*	2.0	—	—	2.0	—
*2,2',4,4',5,5'-Hexachlorobiphenyl	*153*	2.0	—	2.0	—	—
2,2',4,4',6,6'-Hexachlorobiphenyl	*155*	2.0	—	2.0	—	—
*2,3,3',4,4',5-Hexachlorobiphenyl	*156*	2.0	—	—	—	—
2,3,3',4,4',5'-Hexachlorobiphenyl	*157*	2.0	—	—	—	—
2,3,3',4,4',6-Hexachlorobiphenyl	*158*	2.0	—	—	2.0	—
2,3',4,4',5,5'-Hexachlorobiphenyl	*167*	2.0	—	—	—	—
2,3',4,4',5',6-Hexachlorobiphenyl	*168*	2.0	—	—	2.0	—
3,3',4,4',5,5'-Hexachlorobiphenyl	*169*	2.0	—	—	—	—
*2,2',3,3',4,4',5-Heptachlorobiphenyl	*170*	2.0	—	—	—	—
*2,2',3,3',4,4',6-Heptachlorobiphenyl	*171*	2.0	—	—	2.0	—
2,2',3,3',4',5,6-Heptachlorobiphenyl	*177*	2.0	—	2.0	—	—
2,2',3,3',5,5',6-Heptachlorobiphenyl	*178*	2.0	—	—	—	2.0
*2,2',3,4,4',5,5'-Heptachlorobiphenyl	*180*	2.0	—	2.0	—	—
*2,2',3,4,4',5',6-Heptachlorobiphenyl	*183*	2.0	—	—	—	—
*2,2',3,4',5,5',6-Heptachlorobiphenyl	*187*	2.0	—	—	—	—
2,2',3,4',5,6,6'-Heptachlorobiphenyl	*188*	2.0	—	2.0	—	—
*2,3,3',4,4',5,5'-Heptachlorobiphenyl	*189*	2.0	—	—	—	—
*2,3,3',4,4',5',6-Heptachlorobiphenyl	*191*	2.0	—	—	—	—
2,3,3',4',5,5',6-Heptachlorobiphenyl	*193*	—	2.0	—	—	—
*2,2',3,3',4,4',5,5'-Octachlorobiphenyl	*194*	2.0	—	—	—	—
*2,2',3,3',4,5,5',6'-Octachlorobiphenyl	*199*	2.0	—	—	—	—
*2,2',3,3',4,5',6,6'-Octachlorobiphenyl	*201*	2.0	—	2.0	—	—
*2,2',3,3',5,5',6,6'-Octachlorobiphenyl	*202*	2.0	—	—	—	2.0
2,2',3,4,4',5,5',6-Octachlorobiphenyl	*203*	—	2.0	—	—	—
*2,3,3',4,4',5,5',6-Octachlorobiphenyl	*205*	2.0	—	—	—	—
*2,2',3,3',4,4',5,5',6-Nonachlorobiphenyl	*206*	2.0	—	—	—	—
*2,2',3,3',4,5,5',6,6'-Nonachlorobiphenyl	*208*	2.0	—	—	—	—
*Decachlorobiphenyl	*209*	2.0	—	—	—	—

Congeners marked with an asterisk(*) are concentration-certified by direct comparison to the NRCC CLB-1 solutions.

NOTE AND NEW PRODUCTS

In order to keep up-to-date on new releases from Wellington Laboratories Japan Inc., please visit our web-site at www.well-labs.co.jp.

New Products are announced in the News & Information.

ADDITIONAL PRODUCTS

PAH Calibration Sets
and Native and Mass-Labelled Support Solutions

Chlorinated Biphenylols(HO-PCBs)
Native and Mass-Labelled Individuals;
Native and Mass-Labelled Solution/Mixtures

Methoxy Cholorobiphenyls(MeO-PCBs)
Native and Mass-Labelled Individuals;
Native and Mass-Labelled Solution/Mixtures

Cholorobenzenes
Mass-Labelled Individuals;
Native and Mass-Labelled Solution/Mixture

Chlorophenols
Mass-Labelled Individuals;
Native and Mass-Labelled Solution/Mixture

Chlorinated Naphtalenes
Native Individuals; Native Solution/Mixtures

PAH-CVS-A

Catalogue Number	Product (isooctane solution)	Qty/Conc
PAH-CVS-A	PAH-CVS-A Calibration Solutions CS1-CS5	1 Kit (5 ampoules)
PAH-A-CS1	CS1	1.0 ml
PAH-A-CS2	CS2	1.0 ml
PAH-A-CS3	CS3	1.0 ml
PAH-A-CS4	CS4	1.0 ml
PAH-A-CS5	CS5	1.0 ml

Native PAHs	**PAH-A-CS1** (ng/ml)	**PAH-A-CS2** (ng/ml)	**PAH-A-CS3** (ng/ml)	**PAH-A-CS4** (ng/ml)	**PAH-A-CS5** (ng/ml)
Naphthalene	2.0	10	40	200	800
Acenaphthylene	2.0	10	40	200	800
Acenaphthene	2.0	10	40	200	800
Fluorene	2.0	10	40	200	800
Phenanthrene	2.0	10	40	200	800
Anthracene	2.0	10	40	200	800
Fluoranthene	2.0	10	40	200	800
Pyrene	2.0	10	40	200	800
Cyclopenta[*c,d*]pyrene	2.0	10	40	200	800
Benz[*a*]anthracene	2.0	10	40	200	800
Chrysene	2.0	10	40	200	800
5-Methylchrysene	2.0	10	40	200	800
Benzo[*b*]fluoranthene	2.0	10	40	200	800
Benzo[*k*]fluoranthene	2.0	10	40	200	800
Benzo[*j*]fluoranthene	2.0	10	40	200	800
Benzo[*a*]pyrene	2.0	10	40	200	800
Indeno[*1,2,3-c,d*]pyrene	2.0	10	40	200	800
Benzo[*g,h,i*]perylene	2.0	10	40	200	800
Dibenz[*a,h*]anthracene	2.0	10	40	200	800
Dibenzo[*a,l*]pyrene	2.0	10	40	200	800
Dibenzo[*a,e*]pyrene	2.0	10	40	200	800
Dibenzo[*a,i*]pyrene	2.0	10	40	200	800
Dibenzo[*a,h*]pyrene	2.0	10	40	200	800
Deuterated PAHs					
Naphthalene-d_8	100	100	100	100	100
Acenaphthene-d_{10}	100	100	100	100	100
Fluorene-d_{10}	100	100	100	100	100
Phenanthrene-d_{10}	100	100	100	100	100
Anthracene-d_{10}	100	100	100	100	100
Fluoranthene-d_{10}	100	100	100	100	100
Pyrene-d_{10}	100	100	100	100	100
Benz[*a*]anthracene-d_{12}	100	100	100	100	100
Chrysene-d_{12}	100	100	100	100	100
Benzo[*b*]fluoranthene-d_{12}	100	100	100	100	100
Benzo[*k*]fluoranthene-d_{12}	100	100	100	100	100
Benzo[*a*]pyrene-d_{12}	100	100	100	100	100
Indeno[*1,2,3-c,d*]pyrene-d_{12}	100	100	100	100	100
Benzo[*g,h,i*]perylene-d_{12}	100	100	100	100	100
Dibenz[*a,h*]anthracene-d_{14}	100	100	100	100	100
Dibenzo[*a,i*]pyrene-d_{14}	100	100	100	100	100
Deuterated PAH Internal Standards					
Acenaphthylene-d_8	100	100	100	100	100
p-Terphenyl-d_{14}	100	100	100	100	100
Benzo[*e*]pyrene-d_{12}	100	100	100	100	100

SUPPORT SOLUTION FOR PAH-CVS-A

Catalogue Number	Product (isooctane solution)	Qty/Conc
PAH-LCS-A	PAH Labelled Compound Solution	1.2 ml
PAH-ISS-A	PAH Internal Standard Spiking Solution	1.2 ml
PAH-STK-A	PAH Native Stock Solution	1.2 ml

	PAH-LCS-A (ng/ml)	PAH-ISS-A (ng/ml)	PAH-STK-A (ng/ml)
Native PAHs			
Naphthalene	—	—	4000
Acenaphthylene	—	—	4000
Acenaphthene	—	—	4000
Fluorene	—	—	4000
Phenanthrene	—	—	4000
Anthracene	—	—	4000
Fluoranthene	—	—	4000
Pyrene	—	—	4000
Cyclopenta[*c,d*]pyrene	—	—	4000
Benz[*a*]anthracene	—	—	4000
Chrysene	—	—	4000
5-Methylchrysene	—	—	4000
Benzo[*b*]fluoranthene	—	—	4000
Benzo[*k*]fluoranthene	—	—	4000
Benzo[*j*]fluoranthene	—	—	4000
Benzo[*a*]pyrene	—	—	4000
Indeno[*1,2,3-c,d*]pyrene	—	—	4000
Benzo[*g,h,i*]perylene	—	—	4000
Dibenz[*a,h*]anthracene	—	—	4000
Dibenzo[*a,l*]pyrene	—	—	4000
Dibenzo[*a,e*]pyrene	—	—	4000
Dibenzo[*a,i*]pyrene	—	—	4000
Dibenzo[*a,h*]pyrene	—	—	4000
Deuterated PAHs			
Naphthalene-d_8	2000	—	—
Acenaphthene-d_{10}	2000	—	—
Fluorene-d_{10}	2000	—	—
Phenanthrene-d_{10}	2000	—	—
Anthracene-d_{10}	2000	—	—
Fluoranthene-d_{10}	2000	—	—
Pyrene-d_{10}	2000	—	—
Benz[*a*]anthracene-d_{12}	2000	—	—
Chrysene-d_{12}	2000	—	—
Benzo[*b*]fluoranthene-d_{12}	2000	—	—
Benzo[*k*]fluoranthene-d_{12}	2000	—	—
Benzo[*a*]pyrene-d_{12}	2000	—	—
Indeno[*1,2,3-c,d*]pyrene-d_{12}	2000	—	—
Benzo[*g,h,i*]perylene-d_{12}	2000	—	—
Dibenz[*a,h*]anthracene-d_{14}	2000	—	—
Dibenzo[*a,i*]pyrene-d_{14}	2000	—	—
Deuterated PAH Internal Standards			
Acenaphthylene-d_8	—	2000	—
p-Terphenyl-d_{14}	—	2000	—
Benzo[e]pyrene-d_{12}	—	2000	—

PAH-CVS-B

Catalogue Number	Product (isooctane/toluene solution)	Qty/Conc
PAH-CVS-B	PAH-CVS-B Calibration Solutions CS1-CS5	1 Kit (5 ampoules)
PAH-B-CS1	CS1	1.0 ml
PAH-B-CS2	CS2	1.0 ml
PAH-B-CS3	CS3	1.0 ml
PAH-B-CS4	CS4	1.0 ml
PAH-B-CS5	CS5	1.0 ml

Native PAHs	**PAH-B-CS1** (ng/ml)	**PAH-B-CS2** (ng/ml)	**PAH-B-CS3** (ng/ml)	**PAH-B-CS4** (ng/ml)	**PAH-B-CS5** (ng/ml)
Naphthalene	2	10	50	250	1000
2-Methylnaphthalene	2	10	50	250	1000
Acenaphthylene	2	10	50	250	1000
Acenaphthene	2	10	50	250	1000
Fluorene	2	10	50	250	1000
Phenanthrene	2	10	50	250	1000
Anthracene	2	10	50	250	1000
Fluoranthene	2	10	50	250	1000
Pyrene	2	10	50	250	1000
Benzo[*c*]fluorene	2	10	50	250	1000
Cyclopenta[*c,d*]pyrene	2	10	50	250	1000
Benz[*a*]anthracene	2	10	50	250	1000
Chrysene	2	10	50	250	1000
5-Methylchrysene	2	10	50	250	1000
Benzo[*b*]fluoranthene	2	10	50	250	1000
Benzo[*k*]fluoranthene	2	10	50	250	1000
Benzo[*j*]fluoranthene	2	10	50	250	1000
Benzo[e]pyrene	2	10	50	250	1000
Benzo[*a*]pyrene	2	10	50	250	1000
Perylene	2	10	50	250	1000
Indeno[*1,2,3-c,d*]pyrene	2	10	50	250	1000
Benzo[*g,h,i*]perylene	2	10	50	250	1000
Dibenz[*a,h*]anthracene	2	10	50	250	1000
Dibenzo[*a,l*]pyrene	2	10	50	250	1000
Dibenzo[*a,e*]pyrene	2	10	50	250	1000
Dibenzo[*a,i*]pyrene	2	10	50	250	1000
Dibenzo[*a,h*]pyrene	2	10	50	250	1000
PAH-LCS-B (Extraction Standards)					
Naphthalene-d_8	100	100	100	100	100
2-Methylnaphthalene-d_{10}	100	100	100	100	100
Acenaphthylene-d_8	100	100	100	100	100
Phenanthrene-d_{10}	100	100	100	100	100
Anthracene-d_{10}	100	100	100	100	100
Fluoranthene-d_{10}	100	100	100	100	100
Benz[*a*]anthracene-d_{12}	100	100	100	100	100
Chrysene-d_{12}	100	100	100	100	100
Benzo[*b*]fluoranthene-d_{12}	100	100	100	100	100
Benzo[*k*]fluoranthene-d_{12}	100	100	100	100	100
Benzo[*a*]pyrene-d_{12}	100	100	100	100	100
Perylene-d_{12}	100	100	100	100	100
Indeno[*1,2,3-c,d*]pyrene-d_{12}	100	100	100	100	100
Benzo[*g,h,i*]perylene-d_{12}	100	100	100	100	100
Dibenz[*a,h*]anthracene-d_{14}	100	100	100	100	100
Dibenzo[*a,i*]pyrene-d_{14}	100	100	100	100	100
PAH-ISS-B (Recovery Standards)					
Acenaphthene-d_{10}	100	100	100	100	100
Pyrene-d_{10}	100	100	100	100	100
Benzo[e]pyrene-d_{12}	100	100	100	100	100
PAH-SS-B (Sampling Standards)					
Fluorene-d_{10}	100	100	100	100	100
p-Terphenyl-d_{14}	100	100	100	100	100

Catalogue Number	Product (isooctane/toluene/nonane solution)	Qty/Conc
PAH-LCS-B	PAH Labelled Compound Solution	1.2ml
PAH-ISS-B	PAH Internal Standard Spiking Solution	1.2ml
PAH-SS-B	PAH Sampling Standard Solution	1.2ml
PAH-STK-B	PAH Native Stock Solution	1.2ml

	PAH-LCS-B (ng/ml)	PAH-ISS-B (ng/ml)	PAH-SS-B (ng/ml)	PAH-STK-B (ng/ml)
Native PAHs				
Naphthalene	—	—	—	2500
2-Methylnaphthalene	—	—	—	2500
Acenaphthylene	—	—	—	2500
Acenaphthene	—	—	—	2500
Fluorene	—	—	—	2500
Phenanthrene	—	—	—	2500
Anthracene	—	—	—	2500
Fluoranthene	—	—	—	2500
Pyrene	—	—	—	2500
Benzo[*c*]fluorene	—	—	—	2500
Cyclopenta[*c,d*]pyrene	—	—	—	2500
Benz[*a*]anthracene	—	—	—	2500
Chrysene	—	—	—	2500
5-Methylchrysene	—	—	—	2500
Benzo[*b*]fluoranthene	—	—	—	2500
Benzo[*k*]fluoranthene	—	—	—	2500
Benzo[*j*]fluoranthene	—	—	—	2500
Benzo[*e*]pyrene	—	—	—	2500
Benzo[*a*]pyrene	—	—	—	2500
Perylene	—	—	—	2500
Indeno[*1,2,3-c,d*]pyrene	—	—	—	2500
Benzo[*g,h,i*]perylene	—	—	—	2500
Dibenz[*a,h*]anthracene	—	—	—	2500
Dibenzo[*a,l*]pyrene	—	—	—	2500
Dibenzo[*a,e*]pyrene	—	—	—	2500
Dibenzo[*a,i*]pyrene	—	—	—	2500
Dibenzo[*a,h*]pyrene	—	—	—	2500
Deuterated PAHs				
Naphthalene-d_8	5000	—	—	—
2-Methylnaphthalene-d_{10}	5000	—	—	—
Acenaphthylene-d_8	5000	—	—	—
Phenanthrene-d_{10}	5000	—	—	—
Anthracene-d_{10}	5000	—	—	—
Fluoranthene-d_{10}	5000	—	—	—
Benz[*a*]anthracene-d_{12}	5000	—	—	—
Chrysene-d_{12}	5000	—	—	—
Benzo[*b*]fluoranthene-d_{12}	5000	—	—	—
Benzo[*k*]fluoranthene-d_{12}	5000	—	—	—
Benzo[*a*]pyrene-d_{12}	5000	—	—	—
Perylene-d_{12}	5000	—	—	—
Indeno[*1,2,3-c,d*]pyrene-d_{12}	5000	—	—	—
Benzo[*g,h,i*]perylene-d_{12}	5000	—	—	—
Dibenz[*a,h*]anthracene-d_{14}	5000	—	—	—
Dibenzo[*a,i*]pyrene-d_{14}	5000	—	—	—
Deuterated PAH Internal Standards				
Acenaphthene-d_{10}	—	5000	—	—
Pyrene-d_{10}	—	5000	—	—
Benzo[*e*]pyrene-d_{12}	—	5000	—	—
Deuterated PAH Sampling Standards				
Fluorene-d_{10}	—	—	5000	—
p-Terphenyl-d_{14}	—	—	5000	—

METHOD 429: HRGC/LRMS CALIBRATION SOLUTIONS FOR PAHs

Catalogue Number	Product (isooctane solution)	Qty/Conc
L429-CVS	L429-CVS Calibration Solutions CS1-CS5	1 Kit (5 ampoules)
L429-CS1	CS1	1.0 ml
L429-CS2	CS2	1.0 ml
L429-CS3	CS3	1.0 ml
L429-CS4	CS4	1.0 ml
L429-CS5	CS5	1.0 ml

	L429-CS1 (ng/µl)	L429-CS2 (ng/µl)	L429-CS3 (ng/µl)	L429-CS4 (ng/µl)	L429-CS5 (ng/µl)
Native PAHs					
Naphthalene	0.25	0.5	1.0	2.5	5.0
2-Methylnaphthalene	0.25	0.5	1.0	2.5	5.0
Acenaphthene	0.25	0.5	1.0	2.5	5.0
Acenaphthylene	0.25	0.5	1.0	2.5	5.0
Fluorene	0.25	0.5	1.0	2.5	5.0
Phenanthrene	0.25	0.5	1.0	2.5	5.0
Anthracene	0.25	0.5	1.0	2.5	5.0
Fluoranthene	0.25	0.5	1.0	2.5	5.0
Pyrene	0.25	0.5	1.0	2.5	5.0
Benz[a]anthracene	0.25	0.5	1.0	2.5	5.0
Chrysene	0.25	0.5	1.0	2.5	5.0
Benzo[*b*]fluoranthene	0.25	0.5	1.0	2.5	5.0
Benzo[*k*]fluoranthene	0.25	0.5	1.0	2.5	5.0
Benzo[*e*]pyrene	0.25	0.5	1.0	2.5	5.0
Benzo[*a*]pyrene	0.25	0.5	1.0	2.5	5.0
Perylene	0.25	0.5	1.0	2.5	5.0
Indeno[*1,2,3-c,d*]pyrene	0.25	0.5	1.0	2.5	5.0
Dibenz[*a,h*]anthracene	0.25	0.5	1.0	2.5	5.0
Benzo[*g,h,i*]perylene	0.25	0.5	1.0	2.5	5.0
Surrogate Standards					
Fluorene-d_{10}	1.0	1.0	1.0	1.0	1.0
p-Terphenyl-d_{14}	1.0	1.0	1.0	1.0	1.0
Internal Standards					
Naphthalene-d_8	1.0	1.0	1.0	1.0	1.0
2-Methylnaphthalene-d_{10}	1.0	1.0	1.0	1.0	1.0
Acenaphthylene-d_8	1.0	1.0	1.0	1.0	1.0
Phenanthrene-d_{10}	1.0	1.0	1.0	1.0	1.0
Fluoranthene-d_{10}	1.0	1.0	1.0	1.0	1.0
Benz[*a*]anthracene-d_{12}	1.0	1.0	1.0	1.0	1.0
Chrysene-d_{12}	1.0	1.0	1.0	1.0	1.0
Benzo[*b*]fluoranthene-d_{12}	1.0	1.0	1.0	1.0	1.0
Benzo[*k*]fluoranthene-d_{12}	1.0	1.0	1.0	1.0	1.0
Benzo[*a*]pyrene-d_{12}	1.0	1.0	1.0	1.0	1.0
Perylene-d_{12}	1.0	1.0	1.0	1.0	1.0
Indeno[*1,2,3-c,d*]pyrene-d_{12}	1.0	1.0	1.0	1.0	1.0
Dibenz[*a,h*]anthracene-d_{14}	1.0	1.0	1.0	1.0	1.0
Benzo[*g,h,i*]perylene-d_{12}	1.0	1.0	1.0	1.0	1.0
Alternate Standard					
Anthracene-d_{10}	1.0	1.0	1.0	1.0	1.0
Recovery Standards					
Acenaphthene-d_{10}	1.0	1.0	1.0	1.0	1.0
Pyrene-d_{10}	1.0	1.0	1.0	1.0	1.0
Benzo[e]pyrene-d_{12}	1.0	1.0	1.0	1.0	1.0

METHOD 429: HRGC/LRMS SUPPORT SOLUTIONS FOR PAHs

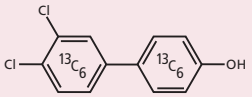
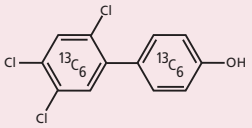
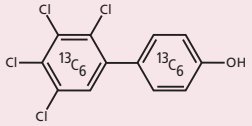
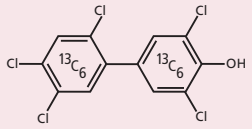
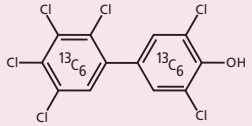
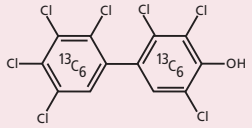
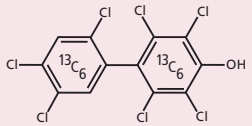
Catalogue Number	Product (isooctane solution)	Qty/Conc
L429-SS	Method 429 Surrogate Standard Stock Solution	1.2 ml
L429-IS	Method 429 Internal Standard Stock Solution	1.2 ml
L429-AS	Method 429 Alternate Standard Stock Solution	1.2 ml
L429-RS	Method 429 Recovery Standard Stock Solution	1.2 ml
L429-PAR	Method 429 Native PAH Stock Solution	1.2 ml

	L429-SS (µg/ml)	L429-IS (µg/ml)	L429-AS (µg/ml)	L429-RS (µg/ml)	L429-PAR (µg/ml)
Native PAHs					
Naphthalene	—	—	—	—	2.0
2-Methylnaphthalene	—	—	—	—	2.0
Acenaphthene	—	—	—	—	2.0
Acenaphthylene	—	—	—	—	2.0
Fluorene	—	—	—	—	2.0
Phenanthrene	—	—	—	—	2.0
Anthracene	—	—	—	—	2.0
Fluoranthene	—	—	—	—	2.0
Pyrene	—	—	—	—	2.0
Benz[*a*]anthracene	—	—	—	—	2.0
Chrysene	—	—	—	—	2.0
Benzo[*b*]fluoranthene	—	—	—	—	2.0
Benzo[*k*]fluoranthene	—	—	—	—	2.0
Benzo[*e*]pyrene	—	—	—	—	2.0
Benzo[*a*]pyrene	—	—	—	—	2.0
Perylene	—	—	—	—	2.0
Indeno[*1,2,3-c,d*]pyrene	—	—	—	—	2.0
Dibenz[*a,h*]anthracene	—	—	—	—	2.0
Benzo[*g,h,i*]perylene	—	—	—	—	2.0
Surrogate Standards					
Fluorene-d_{10}	100	—	—	—	—
p-Terphenyl-d_{14}	100	—	—	—	—
Internal Standards					
Naphthalene-d_8	—	100	—	—	—
2-Methylnaphthalene-d_{10}	—	100	—	—	—
Acenaphthylene-d_8	—	100	—	—	—
Phenanthrene-d_{10}	—	100	—	—	—
Fluoranthene-d_{10}	—	100	—	—	—
Benz[*a*]anthracene-d_{12}	—	100	—	—	—
Chrysene-d_{12}	—	100	—	—	—
Benzo[*b*]fluoranthene-d_{12}	—	100	—	—	—
Benzo[*k*]fluoranthene-d_{12}	—	100	—	—	—
Benzo[*a*]pyrene-d_{12}	—	100	—	—	—
Perylene-d_{12}	—	100	—	—	—
Indeno[*1,2,3-c,d*]pyrene-d_{12}	—	100	—	—	—
Dibenz[*a,h*]anthracene-d_{14}	—	100	—	—	—
Benzo[*g,h,i*]perylene-d_{12}	—	100	—	—	—
Alternate Standard					
Anthracene-d_{10}	—	—	100	—	—
Recovery Standards					
Acenaphthene-d_{10}	—	—	—	100	—
Pyrene-d_{10}	—	—	—	100	—
Benzo[*e*]pyrene-d_{12}	—	—	—	100	—

NATIVE CHLORINATED BIPHENYLOLS (HO-PCBs)

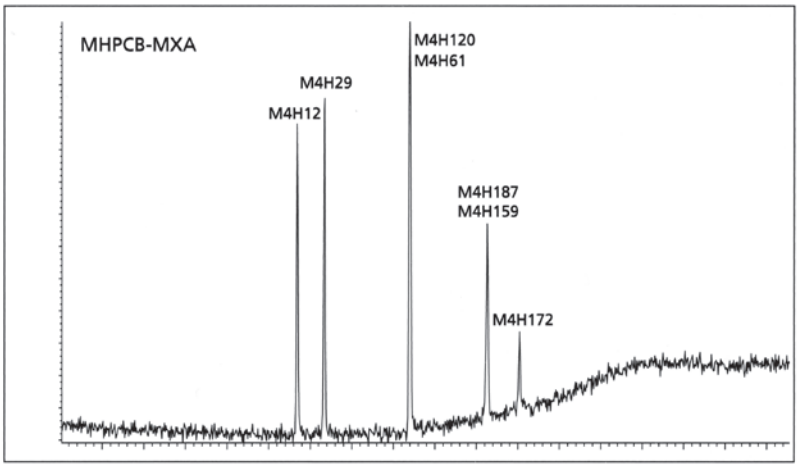
Catalogue Number	Product (nonane solution)	Qty/Conc	
4H104	2,2',4',6,6'-Pentachloro-4-biphenylol	1.2 ml	50 µg/ml
4H107	2,3,3',4',5-Pentachloro-4-biphenylol	1.2 ml	50 µg/ml
4H108	2',3,3',4',5-Pentachloro-4-biphenylol (95%)	1.2 ml	47.5 µg/ml
3H118	2,3',4,4',5-Pentachloro-3-biphenylol	1.2 ml	50 µg/ml
4H130	2,2',3,3',4',5-Hexachloro-4-biphenylol	1.2 ml	50 µg/ml
3H138	2,2',3',4,4',5-Hexachloro-3-biphenylol	1.2 ml	50 µg/ml
4H146	2,2',3,4',5,5'-Hexachloro-4-biphenylol	1.2 ml	50 µg/ml
3H153	2,2',4,4',5,5'-Hexachloro-3-biphenylol	1.2 ml	50 µg/ml
4H172	2,2',3,3',4',5,5'-Heptachloro-4-biphenylol	1.2 ml	50 µg/ml
3H180	2,2',3,4,4',5,5'-Heptachloro-3-biphenylol	1.2 ml	50 µg/ml
4H187	2,2',3,4',5,5',6-Heptachloro-4-biphenylol	1.2 ml	50 µg/ml

MASS-LABELLED CHLORINATED BIPHENYLOLS

Catalogue Number		Product
M4H12		3',4'-Dichloro-4-[$^{13}C_{12}$]biphenylol 1.2 ml; 50 µg/ml (±2.5 µg/ml); in toluene; Isotopic Purity 99% or greater
M4H29		2',4',5'-Trichloro-4-[$^{13}C_{12}$]biphenylol 1.2 ml; 50 µg/ml (±2.5 µg/ml); in toluene; Isotopic Purity 99% or greater
M4H61		2',3',4',5'-Tetrachloro-4-[$^{13}C_{12}$]biphenylol 1.2 ml; 50 µg/ml (±2.5 µg/ml); in toluene; Isotopic Purity 99% or greater
M4H120		2',3,4',5,5'-Pentachloro-4-[$^{13}C_{12}$]biphenylol 1.2 ml; 50 µg/ml (±2.5 µg/ml); in toluene; Isotopic Purity 99% or greater
M4H159		2',3,3',4',5,5'-Hexachloro-4-[$^{13}C_{12}$]biphenylol 1.2 ml; 50 µg/ml (±2.5 µg/ml); in toluene; Isotopic Purity 99% or greater
M4H172		2,2',3,3',4',5,5'-Heptachloro-4-[$^{13}C_{12}$]biphenylol 1.2 ml; 50 µg/ml (±2.5 µg/ml); in toluene; Isotopic Purity 99% or greater
M4H187		2,2',3,4',5,5',6-Heptachloro-4-[$^{13}C_{12}$]biphenylol 1.2 ml; 50 µg/ml (±2.5 µg/ml); in toluene; Isotopic Purity 99% or greater

MASS-LABELLED CHLORINATED BIPHENYLOLS: SOLUTION/MIXTURE

Catalogue Number	Product (toluene solution)	Qty/Conc
MHPCB-MXA	Mass-Labelled Chlorinated Biphenylol Solution/Mixture	1.2 ml
3',4'-Dichloro-4-[$^{13}C_{12}$]biphenylol	M4H12	5 µg/ml
2',4',5'-Trichloro-4-[$^{13}C_{12}$]biphenylol	M4H29	5 µg/ml
2',3',4',5'-Tetrachloro-4-[$^{13}C_{12}$]biphenylol	M4H61	5 µg/ml
2',3,4',5,5'-Pentachloro-4-[$^{13}C_{12}$]biphenylol	M4H120	5 µg/ml
2',3,3',4',5,5'-Hexachloro-4-[$^{13}C_{12}$]biphenylol	M4H159	5 µg/ml
2,2',3,3',4',5,5'-Heptachloro-4-[$^{13}C_{12}$]biphenylol	M4H172	5 µg/ml
2,2',3,4',5,5',6-Heptachloro-4-[$^{13}C_{12}$]biphenylol	M4H187	5 µg/ml



MHPCB-MXA; HRGC/LRMS TIC Chromatogram

NATIVE METHOXY-CHLOROBIPHENYLS (MeO-PCBs)

Catalogue Number	Product (nonane solution)	Qty/Conc
4PM79	3,3',4',5-Tetrachloro-4-methoxybiphenyl	1.2 ml 50 µg/ml
4PM97	2,2',3,4',5'-Pentachloro-4-methoxybiphenyl	1.2 ml 50 µg/ml
4PM101	2,2',4,5,5'-Pentachloro-4'-methoxybiphenyl	1.2 ml 50 µg/ml
4M107	2,3,3',4',5-Pentachloro-4-methoxybiphenyl	1.2 ml 50 µg/ml
4PM108	2,3,3',4,5'-Pentachloro-4'-methoxybiphenyl	1.2 ml 50 µg/ml
3M118	2,3',4,4',5-Pentachloro-3-methoxybiphenyl	1.2 ml 50 µg/ml
4PM120	2,3',4,5,5'-Pentachloro-4'-methoxybiphenyl	1.2 ml 50 µg/ml
4PM127	3,3',4,5,5'-Pentachloro-4'-methoxybiphenyl	1.2 ml 50 µg/ml
4PM130	2,2',3,3',4',5-Hexachloro-4-methoxybiphenyl	1.2 ml 50 µg/ml
4M134	2,2',3,3',5,6-Hexachloro-4-methoxybiphenyl	1.2 ml 50 µg/ml
3PM138	2,2',3',4,4',5-Hexachloro-3-methoxybiphenyl	1.2 ml 50 µg/ml
4M146	2,2',3,4',5,5'-Hexachloro-4-methoxybiphenyl	1.2 ml 50 µg/ml
33PDM155	2,2',4,4',6,6'-Hexachloro-3,3'-dimethoxybiphenyl	1.2 ml 50 µg/ml
4PM159	2,3,3',4,5,5'-Hexachloro-4'-methoxybiphenyl	1.2 ml 50 µg/ml
4M162	2,3,3',4',5,5'-Hexachloro-4-methoxybiphenyl	1.2 ml 50 µg/ml
4M163	2,3,3',4',5,6-Hexachloro-4-methoxybiphenyl	1.2 ml 50 µg/ml
4PM172	2,2',3,3',4,5,5'-Heptachloro-4'-methoxybiphenyl	1.2 ml 50 µg/ml
4M177	2,2',3,3',4',5,6-Heptachloro-4-methoxybiphenyl	1.2 ml 50 µg/ml
4M178	2,2',3,3',5,5',6-Heptachloro-4-methoxybiphenyl	1.2 ml 50 µg/ml
3PM180	2,2',3,4,4',5,5'-Heptachloro-3'-methoxybiphenyl	1.2 ml 50 µg/ml
3PM182	2,2',3,4,4',5,6'-Heptachloro-3'-methoxybiphenyl	1.2 ml 50 µg/ml
3PM183	2,2',3',4,4',5,6'-Heptachloro-3-methoxybiphenyl	1.2 ml 50 µg/ml
3PM184	2,2',3,4,4',6,6'-Heptachloro-3'-methoxybiphenyl	1.2 ml 50 µg/ml
4M187	2,2',3,4',5,5',6-Heptachloro-4-methoxybiphenyl	1.2 ml 50 µg/ml
4M193	2,3,3',4',5,5',6-Heptachloro-4-methoxybiphenyl	1.2 ml 50 µg/ml
4PM198	2,2',3,3',4,5,5',6-Octachloro-4'-methoxybiphenyl	1.2 ml 50 µg/ml
4PM199	2,2',3,3',4',5,5',6-Octachloro-4-methoxybiphenyl	1.2 ml 50 µg/ml
4PM200	2,2',3,3',4,5,6,6'-Octachloro-4'-methoxybiphenyl	1.2 ml 50 µg/ml
4PM201	2,2',3,3',4',5,6,6'-Octachloro-4-methoxybiphenyl	1.2 ml 50 µg/ml
4M202	2,2',3,3'5,5',6,6'-Octachloro-4-methoxybiphenyl	1.2 ml 50 µg/ml
44PDM202	2,2',3,3',5,5',6,6'-Octachloro-4,4'-dimethoxybiphenyl	1.2 ml 50 µg/ml
3PM203	2,2',3,4,4',5,5',6-Octachloro-3'-methoxybiphenyl	1.2 ml 50 µg/ml
4PM208	2,2',3,3',4,5,5',6,6'-Nonachloro-4'-methoxybiphenyl	1.2 ml 50 µg/ml

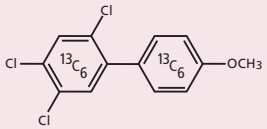
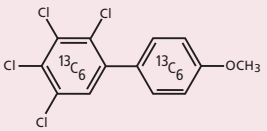
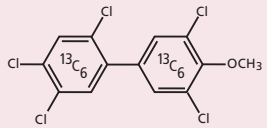
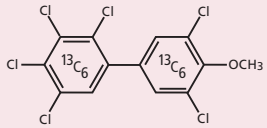
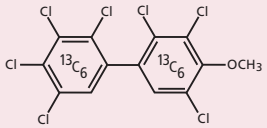
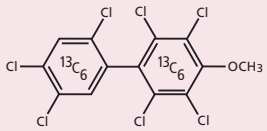
NATIVE METHOXY-CHLOROBIPHENYLS: SOLUTION/MIXTURES

Catalogue Number	Product (nonane solution)		Qty/Conc
MPCB-MXA	Native Chlorinated Methoxybiphenyl Solution/Mixture		1.2 ml
2,3,4,5-Tetrachloro-4'-methoxybiphenyl		4PM61	5 µg/ml
2,3',4,5,5'-Pentachloro-4'-methoxybiphenyl		4PM120	5 µg/ml
2,2',4,4',6,6'-Hexachloro-3,3'-dimethoxybiphenyl		33PDM155	5 µg/ml
2,2',3,4,4',6,6'-Heptachloro-3'-methoxybiphenyl		3PM184	5 µg/ml
2,2',3,3',5,5',6,6'-Octachloro-4-methoxybiphenyl		4M202	5 µg/ml
MPCB-MXB	Native Chlorinated Methoxybiphenyl Solution/Mixture		1.2 ml
3,3',4',5-Tetrachloro-4-methoxybiphenyl		4PM79	5 µg/ml
2,2'4,5,5'-Pentachloro-4'-methoxybiphenyl		4PM101	5 µg/ml
2,2',3,3',5,6-Hexachloro-4-methoxybiphenyl		4M134	5 µg/ml
2,2',3,3',5,5',6-Heptachloro-4-methoxybiphenyl		4M178	5 µg/ml
2,2',3,3',4',5,6,6'-Octachloro-4-methoxybiphenyl		4PM201	5 µg/ml
MPCB-MXC	Native Chlorinated Methoxybiphenyl Solution/Mixture		1.2 ml
2,3,4,4',5-Pentachloro-2'-methoxybiphenyl		2PM114	5 µg/ml
2,2',3,4',5,5'-Hexachloro-4-methoxybiphenyl		4M146	5 µg/ml
2,2',3,4,4',5,6'-Heptachloro-3'-methoxybiphenyl		3PM182	5 µg/ml
2,2',3,4,4',5,5',6-Octachloro-3'-methoxybiphenyl		3PM203	5 µg/ml
2,2',3,3',4,5,5',6,6'-Nonachloro-4'-methoxybiphenyl		4PM208	5 µg/ml
MPCB-MXD	Native Chlorinated Methoxybiphenyl Solution/Mixture		1.2 ml
2,3',4,4',5-Pentachloro-3-methoxybiphenyl		3M118	5 µg/ml
2,2',3',4,4',5-Hexachloro-3-methoxybiphenyl		3PM138	5 µg/ml
2,2',3',4,4',5,6'-Heptachloro-3-methoxybiphenyl		3PM183	5 µg/ml
2,2',3,3',4,5,5',6-Octachloro-4'-methoxybiphenyl		4PM198	5 µg/ml
MPCB-MXE	Native Chlorinated Methoxybiphenyl Solution/Mixture		1.2 ml
2,3,3',4,5'-Pentachloro-4'-methoxybiphenyl		4PM108	5 µg/ml
2,2',3,3',4',5-Hexachloro-4-methoxybiphenyl		4PM130	5 µg/ml
2,2',3,4',5,5',6-Heptachloro-4-methoxybiphenyl		4M187	5 µg/ml
2,2',3,3',4',5,5',6-Octachloro-4-methoxybiphenyl		4PM199	5 µg/ml
MPCB-MXF	Native Chlorinated Methoxybiphenyl Solution/Mixture		1.2 ml
2,3,3',4',5-Pentachloro-4-methoxybiphenyl		4M107	5 µg/ml
2,3,3',4',5,6-Hexachloro-4-methoxybiphenyl		4M163	5 µg/ml
2,2',3,3',4',5,6-Heptachloro-4-methoxybiphenyl		4M177	5 µg/ml
2,2',3,3',4,5,6,6'-Octachloro-4'-methoxybiphenyl		4PM200	5 µg/ml

NATIVE METHOXY-CHLOROBIPHENYLS: SOLUTION/MIXTURES

Catalogue Number	Product (nonane solution)		Qty/Conc
MPCB-MXG	Native Chlorinated Methoxybiphenyl Solution/Mixture		1.2 ml
2,2',3,4',5'-Pentachloro-4-methoxybiphenyl		4PM97	5 µg/ml
2,3,3',4,5,5'-Hexachloro-4'-methoxybiphenyl		4PM159	5 µg/ml
2,2',3,4,4',5,5'-Heptachloro-3'-methoxybiphenyl		3PM180	5 µg/ml
2,2',3,3',5,5',6,6'-Octachloro-4,4'-dimethoxybiphenyl		44PDM202	5 µg/ml
MPCB-MXH	Native Chlorinated Methoxybiphenyl Solution/Mixture		1.2 ml
3,3',4,5,5'-Pentachloro-4'-methoxybiphenyl		4PM127	5 µg/ml
2,2',3,3',4,5,5'-Heptachloro-4'-methoxybiphenyl		4PM172	5 µg/ml
MPCB-MXI	Native Chlorinated Methoxybiphenyl Solution/Mixture		1.2 ml
2,3,3',4',5,5'-Hexachloro-4-methoxybiphenyl		4M162	5 µg/ml
2,3,3',4',5,5',6-Heptachloro-4-methoxybiphenyl		4M193	5 µg/ml

MASS-LABELLED METHOXY-CHLOROBIPHENYLS

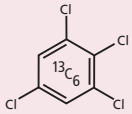
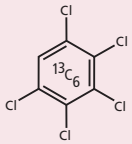
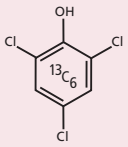
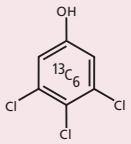
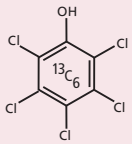
Catalogue Number	Product
M4M29	 2,4,5-Trichloro-4'-methoxy[$^{13}C_{12}$]biphenyl 1.2 ml; 50 µg/ml (±2.5 µg/ml); in toluene
M4M61	 2,3,4,5-Tetrachloro-4'-methoxy[$^{13}C_{12}$]biphenyl 1.2 ml; 50 µg/ml (±2.5 µg/ml); in toluene
M4M120	 2,3',4,5,5'-Pentachloro-4'-methoxy[$^{13}C_{12}$]biphenyl 1.2 ml; 50 µg/ml (±2.5 µg/ml); in toluene
M4M159	 2,3,3',4,5,5'-Hexachloro-4'-methoxy[$^{13}C_{12}$]biphenyl 1.2 ml; 50 µg/ml (±2.5 µg/ml); in toluene
M4M172	 2,2',3,3',4,5,5'-Heptachloro-4'-methoxy[$^{13}C_{12}$]biphenyl 1.2 ml; 50 µg/ml (±2.5 µg/ml); in toluene
M4M187	 2,2',3,4',5,5',6-Heptachloro-4-methoxy[$^{13}C_{12}$]biphenyl 1.2 ml; 50 µg/ml (±2.5 µg/ml); in toluene

*Unless stated otherwise, Isotopic Purities of these compounds are 99% or greater.

MASS-LABELLED METHOXY-CHLOROBIPHENYLS: SOLUTION/MIXTURE

Catalogue Number	Product (toluene solution)	Qty/Conc
MMPCB-MXA	Mass-Labelled Chlorinated Methoxybiphenyl Solution/Mixture	1.2 ml
2,4,5-Trichloro-4'-methoxy[$^{13}C_{12}$]biphenyl	M4M29	5 µg/ml
2,3,4,5-Tetrachloro-4'-methoxy[$^{13}C_{12}$]biphenyl	M4M61	5 µg/ml
2,3',4,5,5'-Pentachloro-4'-methoxy[$^{13}C_{12}$]biphenyl	M4M120	5 µg/ml
2,3,3',4,5,5'-Hexachloro-4'-methoxy[$^{13}C_{12}$]biphenyl	M4M159	5 µg/ml
2,2',3,3',4,5,5'-Heptachloro-4'-methoxy[$^{13}C_{12}$]biphenyl	M4M172	5 µg/ml
2,2',3,4',5,5',6-Heptachloro-4-methoxy[$^{13}C_{12}$]biphenyl	M4M187	5 µg/ml

MASS-LABELLED CHLOROBENZENES & CHLOROPHENOLS INDIVIDUAL SOLUTIONS

Catalogue Number		Product
MBZ-1235		1,2,3,5-Tetrachloro[$^{13}C_6$]benzene 1.2 ml; 100 µg/ml (±5.0 µg/ml); in isooctane
確 **MCBZ-12345**		1,2,3,4,5-Pentachloro[$^{13}C_6$]benzene 1.2 ml; 100 µg/ml (±5.0 µg/ml); in isooctane
MCP-246		2,4,6-Trichloro[$^{13}C_6$]phenol 1.2 ml; 100 µg/ml (±5.0 µg/ml); in isooctane
MCP-345		3,4,5-Trichloro[$^{13}C_6$]phenol 1.2 ml; 100 µg/ml (±5.0 µg/ml); in isooctane
MCP-23456		Pentachloro[$^{13}C_6$]phenol 1.2 ml; 100 µg/ml (±5.0 µg/ml); in isooctane

確 第一種特定化学物質

NATIVE CHLOROBENZENES: SOLUTION/MIXTURE

Catalogue Number	Product (isooctane solution)	Qty/Conc
確 **CBS**	Native Chlorobenzene Solution/Mixture	1.2 ml
Chlorobenzene		100 µg/ml
1,2-Dichlorobenzene		100 µg/ml
1,3-Dichlorobenzene		100 µg/ml
1,4-Dichlorobenzene		100 µg/ml
1,2,3-Trichlorobenzene		100 µg/ml
1,2,4-Trichlorobenzene		100 µg/ml
1,3,5-Trichlorobenzene		100 µg/ml
1,2,3,4-Tetrachlorobenzene		100 µg/ml
1,2,3,5-Tetrachlorobenzene		100 µg/ml
1,2,4,5-Tetrachlorobenzene		100 µg/ml
Pentachlorobenzene		100 µg/ml
Hexachlorobenzene		100 µg/ml

MASS-LABELLED CHLOROBENZENES: SOLUTION/MIXTURE

Catalogue Number	Product (isooctane solution)	Qty/Conc
確 **MCBS**	Mass-Labelled Chlorobenzene Solution/Mixture	1.2 ml
Chloro[$^{13}C_6$]benzene		100 µg/ml
1,4-Dichloro[$^{13}C_6$]benzene		100 µg/ml
1,2,3-Trichloro[$^{13}C_6$]benzene		100 µg/ml
1,2,3,4-Tetrachloro[$^{13}C_6$]benzene		100 µg/ml
Pentachloro[$^{13}C_6$]benzene		100 µg/ml
Hexachloro[$^{13}C_6$]benzene		100 µg/ml

NATIVE CHLOROPHENOLS: SOLUTION/MIXTURE

Catalogue Number	Product (isooctane solution)	Qty/Conc
CPS	Native Chlorophenol Solution/Mixture	1.2 ml
2-Chlorophenol		100 µg/ml
3-Chlorophenol		100 µg/ml
4-Chlorophenol		100 µg/ml
2,3-Dichlorophenol		100 µg/ml
2,4-Dichlorophenol		100 µg/ml
2,5-Dichlorophenol		100 µg/ml
2,6-Dichlorophenol		100 µg/ml
3,4-Dichlorophenol		100 µg/ml
3,5-Dichlorophenol		100 µg/ml
2,3,4-Trichlorophenol		100 µg/ml
2,3,5-Trichlorophenol		100 µg/ml
2,3,6-Trichlorophenol		100 µg/ml
2,4,5-Trichlorophenol		100 µg/ml
2,4,6-Trichlorophenol		100 µg/ml
3,4,5-Trichlorophenol		100 µg/ml
2,3,4,5-Tetrachlorophenol		100 µg/ml
2,3,4,6-Tetrachlorophenol		100 µg/ml
2,3,5,6-Tetrachlorophenol		100 µg/ml
Pentachlorophenol		100 µg/ml

MASS-LABELLED CHLOROPHENOLS: SOLUTION/MIXTURE

Catalogue Number	Product (isooctane solution)	Qty/Conc
MCPS	Mass-Labelled Chlorophenol Solution/Mixture	1.2 ml
4-Chloro[$^{13}C_6$]phenol		100 µg/ml
2,4-Dichloro[$^{13}C_6$]phenol		100 µg/ml
2,4,5-Trichloro[$^{13}C_6$]phenol		100 µg/ml
2,3,4,5-Tetrachloro[$^{13}C_6$]phenol		100 µg/ml
Pentachloro[$^{13}C_6$]phenol		100 µg/ml

確 第一種特定化学物質

NATIVE CHLORINATED NAPHTHALENES(PCNs)

Catalogue Number	Product (nonane solution)	Qty/Conc	
PN-2S	2-Chloronaphthalene	1.2 ml	50 µg/ml
PN-6S	1,5-Dichloronaphthalene	1.2 ml	50 µg/ml
PN-12S	2,7-Dichloronaphthalene	1.2 ml	50 µg/ml
確 PN-13S	1,2,3-Trichloronaphthalene	1.2 ml	50 µg/ml
確 PN-27S	1,2,3,4-Tetrachloronaphthalene	1.2 ml	50 µg/ml
確 PN-28S	1,2,3,5-Tetrachloronaphthalene	1.2 ml	50 µg/ml
確 PN-31S	1,2,3,8-Tetrachloronaphthalene	1.2 ml	50 µg/ml
確 PN-46S	1,4,5,8-Tetrachloronaphthalene	1.2 ml	50 µg/ml
確 PN-48S	2,3,6,7-Tetrachloronaphthalene	1.2 ml	50 µg/ml
確 PN-50S	1,2,3,4,6-Pentachloronaphthalene	1.2 ml	50 µg/ml
確 PN-52S	1,2,3,5,7-Pentachloronaphthalenel	1.2 ml	50 µg/ml
確 PN-53S	1,2,3,5,8-Pentachloronaphthalene	1.2 ml	50 µg/ml
確 PN-66S	1,2,3,4,6,7-Hexachloronaphthalene	1.2 ml	50 µg/ml
確 PN-69S	1,2,3,5,7,8-Hexachloronaphthalene	1.2 ml	50 µg/ml
確 PN-72S	1,2,4,5,7,8-Hexachloronaphthalene	1.2 ml	50 µg/ml
確 PN-73S	1,2,3,4,5,6,7-Heptachloronaphthalene	1.2 ml	50 µg/ml
確 PN-75S	Octachloronaphthalene	1.2 ml	50 µg/ml

NATIVE CHLORINATED NAPHTHALENES(PCNs): SOLUTION/MIXTURES

Catalogue Number	Product (nonane solution)	Qty/Conc
確 PCN-MXA	Native PCN Solution/Mixture	1.2 ml
	IUPAC	
2-Chloronaphthalene	*2*	5 µg/ml
1,5-Dichloronaphthalene	*6*	5 µg/ml
1,2,3-Trichloronaphthalene	*13*	5 µg/ml
1,2,3,5-Tetrachloronaphthalene	*28*	5 µg/ml
1,2,3,5,7-Pentachloronaphthalenel	*52*	5 µg/ml
1,2,3,4,6,7-Hexachloronaphthalene	*66*	5 µg/ml
1,2,3,4,5,6,7-Heptachloronaphthalene	*73*	5 µg/ml
Octachloronaphthalene	*75*	5 µg/ml
確 PCN-MXC	Native PCN Solution/Mixture	1.2 ml
	IUPAC	
1,2,3,4-Tetrachloronaphthalene	*27*	5 µg/ml
1,2,5,6-Tetrachloronaphthalene	*36*	4.75 µg/ml
1,4,5,8-Tetrachloronaphthalene	*46*	5 µg/ml
2,3,6,7-Tetrachloronaphthalene	*48*	5 µg/ml
1,2,3,4,6-Pentachloronaphthalene	*50*	5 µg/ml
1,2,3,5,8-Pentachloronaphthalene	*53*	5 µg/ml
1,2,3,5,7,8-Hexachloronaphthalene	*69*	5 µg/ml
1,2,4,5,7,8-Hexachloronaphthalene	*72*	5 µg/ml

確約書について

「第一種特定化学物質」に指定されている化合物については、製造、輸入、使用は原則として禁止されています。但し、試験研究用に使用する場合に限り、経済産業大臣の許可を得ることにより使用することが出来ます。この為、使用目的等を明記した「確約書」を弊社宛に提出頂き、許可を取得したうえで販売させて頂きますのでご了承ください。

「化学物質の審査及び製造等の規制に関する法律（略称：化審法）」に指定されている
第一種特定化学物質に該当する弊社取扱製品は、本文中に以下の略号で表示しています。

確 第一種特定化学物質

弊社取扱品目中の第一種特定化学物質該当製品　（2010 年 4 月 1 日現在）

・ポリ塩化ビフェニル（PCB）
・ポリ塩化ナフタレン（PCN）（塩素数が 3 以上のものに限る）
・ヘキサクロロベンゼン
・PFOS 又はその塩
・PFOSE
・ペンタクロロベンゼン
・ヘキサブロモビフェニル
・テトラブロモジフェニルエーテル
・ペンタブロモジフェニルエーテル
・ヘキサブロモジフェニルエーテル
・ヘプタブロモジフェニルエーテル

（化学物質の審査及び製造等の規制に関する法律施行令第一条より）

ご購入をお考えの「第一種特定化学物質」該当製品がございましたら、下記までご連絡ください。該当製品の「確約書ひな型」をお送り致します。

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第一種特定化学物質を輸入する為の「確約書」記入例

（ポリ塩化ビフェニル（PCB）を例にしてあります。）

確　約　書

平成　　年　　月　　日

株式会社ウエリントン ラボラトリーズ ジャパン
代表取締役　加坂　達司　殿

㈰住所
㈪会社名
㈫代表者名

代表者印

今般、貴社から購入予定の第１種特定化学物質は、「化学物質の審査及び製造等の規制に関する法律」（昭和４８年法律第１１７号）第２５条ただし書に規定する試験研究用として以下の用途に全量使用し、その取扱い及び試験研究終了後の処理については、細心の注意を払うことを確約いたします。

記入例

１．第１種特定化学物質の名称
ポリ塩化ビフェニル（PCB）

２．第１種特定化学物質の商品としての組成、数量及び荷姿
①PCB標準混合溶液　（　種類　ノナン溶液　１セット(200ul×5)　）×１
ガラスアンプル　組成表は別紙参照
②PCB標準混合溶液　（　種類　ノナン溶液　1.2ml）×１
ガラスアンプル　組成表は別紙参照

３．第１種特定化学物質を試験研究用に使用する者の所属、氏名及び電話番号
所　　属：
氏　　名：
電話番号：

４．第１種特定化学物質を試験研究用に使用する事業所名及び所在地
事業所名：
所 在 地：

５．試験研究の目的と概要
(1) 目的及び内容
環境試料（大気、排ガス、土壌）に含まれるポリ塩化ビフェニル（PCB）を異性体別に正確に定量分析するための標準物質として使用する。
ポリ塩化ビフェニル（PCB）は、理論的には２０９種類の異性体が存在し、今までの環境試料の分析ではPCB異性体の総量で定量されていた。しかし、その中には毒性の強い異性体（DL-PCB）が存在することから、毒性を正しく評価する為には、ポリ塩化ビフェニル（PCB）を異性体別に分別定量する必要がある。
今回購入するポリ塩化ビフェニル（PCB）は、ガスクロマトグラフ／質量分析計（GC／MS）で異性体別に定量分析を行うための標準溶液及び内標準液とする。

(2) 使用方法及び使用量
製品コード
上記のPCBの混合標準液（　　）は、そのまま、又は希釈し○ng/mlの内標準溶液として、１試料につき、その○mlを試料に添加して使用する。
また、（　　）は、検量線作成用として、1回の測定でその１mlをGC／MSに注入して使用する。

(3) 使用期間
平成　　年　　月～平成　　年　　月

(4) 保管・廃棄方法
使用期間中は、標準原液及び溶液は二重栓標準溶液びんに入れ、施錠可能な毒劇物専用冷蔵庫で厳重に保管する。
標準原液及び溶液は、全量使用することが前提であるが、万が一残った場合には、ガラスアンプル又は二重栓標準溶液瓶に入れ、更にポリエチレン袋で包装し密封の上、ふた付き空き缶に入れ、施錠可能な毒劇物専用冷蔵庫で厳重に永久保存する。また内部標準液としてPCBを添加し使用した後の試料については、ガラスアンプルに入れ、上記の処理を施し施錠可能な毒劇物専用冷蔵庫で厳重に永久保存する。

上記「確約書」記入例は、平成 23 年 3 月 28 日経済産業省製造産業局化学物質管理課化学物質安全室からの、下記公表文書の記入例に基いています。

「試験研究用の第一種特定化学物質（化学物質の審査及び製造等の規制に関する法律）等の輸入確認申請に際して申請書の記載内容を証明する書類（確約書等）の記載要領について」

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