

## **Solutions of Polychlorodibenzo-p-dioxins and Polychlorodibenzofurans in n-Nonane**

Art. ID	BCR-614
Unit	set
Deliverydetails	De Minimis

### Description

The set consists of 11 ampoules, each one of BCR-614S2, BCR-614S4, BCR-614S5, BCR-614S6, BCR-614S7, BCR-614S8, BCR-614S9 and two of BCR-614S1 and BCR-614S3. The nine solutions of natural and labelled PCDD and PCDF congeners in n-nonane are presented in brown glass ampoules sealed under helium gas. Ampoules S1 to S7 contain about 1 mL solution and ampoule S8 about 0.5 mL. Solutions S1-8 are supplied in one set together with a non-certified solution S9 intended to verify performance of the chromatographic separation system. The solutions BCR 614 S1 to S5 are intended as GC-HRMS calibration solutions and are ready for use. An additional solution S0 is available separately for very low level determinations. To apply solutions BCR 614 S6 to S8 in accordance with the European Standard EN 1948, appropriate dilutions should be prepared following the recommendations given in the latter document. Solution BCR 614 S9 may serve to check the instrumental performance, particularly with regard to the chromatographic separation of the 2,3,7,8-Cl substituted congeners from potential interfering compounds. With the current technology, the separation of all analytes from interfering isomers in environmental samples requires the analysis to be performed on at least two capillary columns with different polarity. More details are given in the certification report of BCR-614 in the chapter on instructions for use. Certified purity of the individual 12C and 13C labeled PCDD and PCDF congeners used for the preparation of the solutions

Text/Information	Analyte/Parameter	CAS number	Concentration/Value	Unit	Method	Source
Certified purity	2,3,7,8-Tetrachlorodibenzo-p-dioxin	[1746-01-6]	96,4 ± 2,7	%		
Certified purity	1,2,3,7,8-Pentachlorodibenzo-p-dioxin	[40321-76-4]	97,3 ± 1,1	%		
Certified purity	1,2,3,4,7,8-Hexachlorodibenzo-p-dioxin	[39227-28-6]	94,6 ± 1,9	%		
Certified purity	1,2,3,6,7,8-Hexachlorodibenzo-p-dioxin	[57653-85-7]	98,2 ± 0,6	%		
Certified purity	1,2,3,7,8,9-Hexachlorodibenzo-p-dioxin	[19408-74-3]	97,9 ± 1,0	%		
Certified purity	1,2,3,4,6,7,8-Heptachlorodibenzo-p-dioxin	[35822-46-9]	98,1 ± 0,4	%		
Certified purity	Octachlorodibenzo-p-dioxin	[3268-87-9]	99,8 ± 0,3	%		
Certified purity	2,3,7,8-Tetrachlorodibenzofuran	[51207-31-9]	99,5 ± 0,4	%		
Certified purity	1,2,3,7,8-Pentachlorodibenzofuran	[57117-41-6]	98,7 ± 1,1	%		
Certified purity	2,3,4,7,8-Pentachlorodibenzofuran	[57117-31-4]	99,6 ± 0,5	%		

Certified purity	1,2,3,4,7,8-Hexachlorod ibenzofuran	[55684-94-1]	97,8 ± 0,6	%
Certified purity	1,2,3,6,7,8-Hexachlorod ibenzofuran	[57117-44-9]	99,7 ± 0,5	%
Certified purity	1,2,3,7,8,9-Hexachlorod ibenzofuran	[72918-21-9]	96,4 ± 1,1	%
Certified purity	2,3,4,6,7,8-Hexachlorod ibenzofuran	[60851-34-5]	98,4 ± 0,8	%
Certified purity	1,2,3,4,6,7,8-Heptachlo rodibenzofuran	[67562-39-4]	99,8 ± 0,3	%
Certified purity	1,2,3,4,7,8,9-Heptachlo rodibenzofuran	[55673-89-7]	98,8 ± 0,5	%
Certified purity	1,2,3,4,6,7,8,9-Octachl orodibenzofuran	[39001-02-0]	99,2 ± 1,6	%
Certified purity	13C-2,3,7,8-Tetrachloro dibenzo-p-dioxin	[1746-01-6]/unl abelled	98,6 ± 0,3	%
Certified purity	13C-1,2,3,7,8-Pentachlo rodibenzo-p-dioxin	[109719-79-1]	98,6 ± 0,5	%
Certified purity	13C-1,2,3,4,7,8-Hexachl orodibenzo-p-dioxin	[109719-80-4]	99,1 ± 0,3	%
Certified purity	13C-1,2,3,6,7,8-Hexachl orodibenzo-p-dioxin	[109719-81-5]	96,7 ± 0,5	%
Certified purity	13C-1,2,3,7,8,9-Hexachl orodibenzo-p-dioxin	[109719-82-6]	99,1 ± 0,4	%
Certified purity	13C-1,2,3,4,6,7,8-Hepta chlorodibenzo-p-dioxin	[35822-46-9]/un labelled	99,3 ± 1,3	%
Certified purity	13C-1,2,3,4,6,7,8,9-Oct achlorodibenzo-p-dioxin	[114423-97-1]	98,6 ± 0,2	%
Certified purity	13C-2,3,7,8-Tetrachloro dibenzofuran	[89059-46-1]	99,8 ± 0,4	%
Certified purity	13C-1,2,3,7,8-Pentachlo rodibenzofuran	[57117-41-6]/un labelled	99,6 ± 0,4	%
Certified purity	13C-2,3,4,7,8-Pentachlo rodibenzofuran	[57117-31-4]/un labelled	99,5 ± 0,3	%
Certified purity	13C-1,2,3,4,7,8-Hexachl orodibenzofuran	[70648-26-9]/un labelled	98,8 ± 0,3	%
Certified purity	13C-1,2,3,6,7,8-Hexachl orodibenzofuran	[57117-44-9]/un labelled	99,5 ± 0,5	%

Certified purity	13C-1,2,3,7,8,9-Hexachl orodibenzofuran	[72918-21-9]/un labelled	98,2 ± 0,5	%
Certified purity	13C-2,3,4,6,7,8-Hexachl orodibenzofuran	[60851-34-5]/un labelled	99,6 ± 0,4	%
Certified purity	13C-1,2,3,4,6,7,8-Hepta chlorodibenzofuran	[67562-39-4]/un labelled	99,8 ± 0,3	%
Certified purity	13C-1,2,3,4,7,8,9-Hepta chlorodibenzofuran	[55673-89-7]/un labelled	99,3 ± 0,8	%
Certified purity	13C-1,2,3,4,6,7,8,9-Oct achlorodibenzofuran	[39001-02-0]/un labelled	99,6 ± 0,8	%
Certified purity	13C-1,2,3,4-Tetrachloro dibenzo-p-dioxin	[114423-99-3]	99,2 ± 0,3	%