

Chlorinated dibenzo-p-dioxins and chlorinated dibenzofurans

Chlorinated dibenzo-p-dioxins and chlorinated dibenzofurans**Chlorinated dibenzo-p-dioxins**

| Code | Product | Unit |
|------------|--|------------|
| U-RPE-023 | Dibenzo-p-dioxin | 25 mg |
| U-RPE-023S | Dibenzo-p-dioxin 50 µg/mL in Toluene | 1 mL |
| U-RPE-015 | 1-Chlorodibenzo-p-dioxin | 25 mg |
| U-RPE-015S | 1-Chlorodibenzo-p-dioxin 50 µg/mL in Toluene | 1 mL |
| U-RPE-016 | 2-Chlorodibenzo-p-dioxin | 25 mg |
| U-RPE-016S | 2-Chlorodibenzo-p-dioxin 50 µg/mL in Toluene | 1 mL |
| U-RPE-051 | 2,3-Dichlorodibenzo-p-dioxin | 5 mg |
| U-RPE-051S | 2,3-Dichlorodibenzo-p-dioxin 50 µg/mL in Toluene | 1 mL |
| U-RPE-025 | 2,7-Dichlorodibenzo-p-dioxin | 5 mg |
| U-RPE-025S | 2,7-Dichlorodibenzo-p-dioxin 50 µg/mL in Toluene | 1 mL |
| U-RPE-052 | 2,8-Dichlorodibenzo-p-dioxin | 5 mg |
| U-RPE-052S | 2,8-Dichlorodibenzo-p-dioxin 50 µg/mL in Toluene | 1 mL |
| U-RPE-059 | 1,2,3-Trichlorodibenzo-p-dioxin | 5 mg |
| U-RPE-059S | 1,2,3-Trichlorodibenzo-p-dioxin 50 µg/mL in Toluene | 1 mL |
| U-RPE-026 | 1,2,4-Trichlorodibenzo-p-dioxin | 5 mg |
| U-RPE-026S | 1,2,4-Trichlorodibenzo-p-dioxin 50 µg/mL in Toluene | 1 mL |
| U-RPE-053A | 2,3,7-Trichlorodibenzo-p-dioxin | 5 mg |
| U-RPE-053S | 2,3,7-Trichlorodibenzo-p-dioxin 50 µg/mL in Toluene | 1 mL |
| U-RPE-027 | 1,2,3,4-Tetrachlorodibenzo-p-dioxin | 25 mg |
| U-RPE-027S | 1,2,3,4-Tetrachlorodibenzo-p-dioxin 50 µg/mL in Toluene | 1 mL |
| U-RPE-054A | 1,3,6,8-Tetrachlorodibenzo-p-dioxin | 5 mg |
| U-RPE-054S | 1,3,6,8-Tetrachlorodibenzo-p-dioxin 50 µg/mL in Toluene | 1 mL |
| U-RPE-060A | 1,3,7,8-Tetrachlorodibenzo-p-dioxin | 5 mg |
| U-RPE-060S | 1,3,7,8-Tetrachlorodibenzo-p-dioxin 50 µg/mL in Toluene | 1 mL |
| U-RPE-029S | 2,3,7,8-Tetrachlorodibenzo-p-dioxin 10 µg/mL in Toluene | 1 mL |
| NIST-3063 | 2,3,7,8-Tetrachlorodibenzo-p-dioxin (2,3,7,8-TCDD) in Methan Certified value 2,3,7,8-Tetrachlorodibenzo-p-dioxin 0.410 ± 0.014 mg/kg | 5 x 1.2 mL |
| NIST-1614 | 2,3,7,8-TCDD in Isooctane Standard reference material (SRM®) 1614 consists of separate solutions of unlabelled and labelled 2,3,7,8-tetrachlorodibenzo-p-dioxin (2,3,7,8-TCDD) in isooctane. Three ampoules contain approximately 1.2 mL each of an isooctane solution of unlabelled 2,3,7,8-TCDD, and three ampoules contain approximately 1.2 mL isooctane solution of ¹³ C-labelled 2,3,7,8-TCDD. Certified concentration 2,3,7,8-TCDD 98.2 ± 3.3 ng/g 2,3,7,8-TCDD- ¹³ C ₁₂ 95.6 ± 1.5 ng/g | 6 x 1.2 mL |
| U-RPE-055A | 1,2,3,4,7-Pentachlorodibenzo-p-dioxin | 5 mg |
| U-RPE-055S | 1,2,3,4,7-Pentachlorodibenzo-p-dioxin 50 µg/mL in Toluene | 1 mL |
| U-RPE-056A | 1,2,3,7,8-Pentachlorodibenzo-p-dioxin | 5 mg |
| U-RPE-056S | 1,2,3,7,8-Pentachlorodibenzo-p-dioxin 50 µg/mL in Toluene | 1 mL |
| U-RPE-057A | 1,2,4,7,8-Pentachlorodibenzo-p-dioxin | 5 mg |
| U-RPE-057S | 1,2,4,7,8-Pentachlorodibenzo-p-dioxin 50 µg/mL in Toluene | 1 mL |
| U-RPE-058A | 1,2,3,4,7,8-Hexachlorodibenzo-p-dioxin | 5 mg |

Chlorinated dibenzo-p-dioxins and chlorinated dibenzofurans

| Code | Product | Unit |
|----------------------------------|---|-------|
| U-RPE-058S | 1,2,3,4,7,8-Hexachlorodibenzo-p-dioxin 50 µg/mL in Toluene | 1 mL |
| U-RPE-063A | 1,2,3,4,6,7,8-Heptachlorodibenzo-p-dioxin | 5 mg |
| U-RPE-063S | 1,2,3,4,6,7,8-Heptachlorodibenzo-p-dioxin 50 µg/mL in Toluene | 1 mL |
| U-RPE-017A | Octachlorodibenzo-p-dioxin | 50 mg |
| U-RPE-017S | Octachlorodibenzo-p-dioxin 50 µg/mL in Toluene | 1 mL |
| Chlorinated dibenzofurans | | |
| U-RPE-022 | Dibenzofuran | 50 mg |
| U-RPE-022S | Dibenzofuran 50 µg/mL in Toluene | 1 mL |
| U-RPE-030 | 2-Chlorodibenzofuran | 5 mg |
| U-RPE-030S | 2-Chlorodibenzofuran 50 µg/mL in Toluene | 1 mL |
| U-RPE-032 | 2,4-Dichlorodibenzofuran | 5 mg |
| U-RPE-032S | 2,4-Dichlorodibenzofuran 50 µg/mL in Toluene | 1 mL |
| U-RPE-033 | 2,6-Dichlorodibenzofuran | 5 mg |
| U-RPE-033S | 2,6-Dichlorodibenzofuran 50 µg/mL in Toluene | 1 mL |
| U-RPE-018 | 2,8-Dichlorodibenzofuran | 10 mg |
| U-RPE-018S | 2,8-Dichlorodibenzofuran 50 µg/mL in Toluene | 1 mL |
| U-RPE-036 | 2,3,8-Trichlorodibenzofuran | 5 mg |
| U-RPE-036S | 2,3,8-Trichlorodibenzofuran 50 µg/mL in Toluene | 1 mL |
| U-RPE-034 | 2,4,6-Trichlorodibenzofuran | 5 mg |
| U-RPE-034S | 2,4,6-Trichlorodibenzofuran 50 µg/mL in Toluene | 1 mL |
| U-RPE-035 | 2,4,8-Trichlorodibenzofuran | 5 mg |
| U-RPE-035S | 2,4,8-Trichlorodibenzofuran 50 µg/mL in Toluene | 1 mL |
| U-RPE-039A | 1,2,3,4-Tetrachlorodibenzofuran | 5 mg |
| U-RPE-039S | 1,2,3,4-Tetrachlorodibenzofuran 50 µg/mL in Toluene | 1 mL |
| U-RPE-040A | 1,3,7,8-Tetrachlorodibenzofuran | 5 mg |
| U-RPE-040S | 1,3,7,8-Tetrachlorodibenzofuran 50 µg/mL in Toluene | 1 mL |
| U-RPE-037 | 2,3,7,8-Tetrachlorodibenzofuran | 1 mg |
| U-RPE-037S | 2,3,7,8-Tetrachlorodibenzofuran 50 µg/mL in Toluene | 1 mL |
| U-RPE-041A | 1,2,3,4,8-Pentachlorodibenzofuran | 5 mg |
| U-RPE-041S | 1,2,3,4,8-Pentachlorodibenzofuran 50 µg/mL in Toluene | 1 mL |
| U-RPE-042A | 1,2,3,7,8-Pentachlorodibenzofuran | 5 mg |
| U-RPE-042S | 1,2,3,7,8-Pentachlorodibenzofuran 50 µg/mL in Toluene | 1 mL |
| U-RPE-043A | 1,2,3,4,7,8-Hexachlorodibenzofuran | 5 mg |
| U-RPE-043S | 1,2,3,4,7,8-Hexachlorodibenzofuran 50 µg/mL in Toluene | 1 mL |
| U-RPE-044A | 1,2,3,4,6,7,8-Heptachlorodibenzofuran | 5 mg |
| U-RPE-044S | 1,2,3,4,6,7,8-Heptachlorodibenzofuran 50 µg/mL in Toluene | 1 mL |
| U-RPE-019A | Octachlorodibenzofuran | 50 mg |
| U-RPE-019S | Octachlorodibenzofuran 50 µg/mL in Toluene | 1 mL |

Isotope labelled and unlabelled chlorinated dibenzo-p-dioxins see also "Environmental contaminant standards from CIL" section "Dioxin and furan standards".

Chlorinated dibenzo-p-dioxins and chlorinated dibenzofurans

| | | |
|------|---------|------|
| Code | Product | Unit |
|------|---------|------|

Dioxin/Furan multicomponent standard solutions

| | | |
|---------|--|-----|
| BCR-614 | Solutions of Polychlorodibenzo-p-dioxins and Polychlorodibenzofurans in n-Nonane (EN 1948) | set |
|---------|--|-----|

The set consists of 11 ampoules, one of BCR-614S2, BCR-614S4-9 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

| Congener | Purity (%) | Uncertainty (%) |
|--|------------|-----------------|
| 2,3,7,8-T ₄ CDD | 96.4 | 2.7 |
| 1,2,3,7,8-P ₅ CDD | 97.3 | 1.1 |
| 1,2,3,4,7,8-H ₆ CDD | 94.6 | 1.9 |
| 1,2,3,6,7,8-H ₆ CDD | 98.2 | 0.6 |
| 1,2,3,7,8,9-H ₆ CDD | 97.9 | 1.0 |
| 1,2,3,4,6,7,8-H ₇ CDD | 98.1 | 0.4 |
| 1,2,3,4,6,7,8,9-O ₈ CDD | 99.8 | 0.3 |
| 2,3,7,8-T ₄ CDF | 99.5 | 0.4 |
| 1,2,3,7,8-P ₅ CDF | 98.7 | 1.1 |
| 2,3,4,7,8-P ₅ CDF | 99.6 | 0.5 |
| 1,2,3,4,7,8-H ₆ CDF | 97.8 | 0.6 |
| 1,2,3,6,7,8-H ₆ CDF | 99.7 | 0.5 |
| 1,2,3,7,8,9-H ₆ CDF | 96.4 | 1.1 |
| 2,3,4,6,7,8-H ₆ CDF | 98.4 | 0.8 |
| 1,2,3,4,6,7,8-H ₇ CDF | 99.8 | 0.3 |
| 1,2,3,4,7,8,9-H ₇ CDF | 98.8 | 0.5 |
| 1,2,3,4,6,7,8,9-O ₈ CDF | 99.2 | 1.6 |
| ¹³ C-2,3,7,8-T ₄ CDD | 98.6 | 0.3 |
| ¹³ C-1,2,3,7,8-P ₅ CDD | 98.6 | 0.5 |
| ¹³ C-1,2,3,4,7,8-H ₆ CDD | 99.1 | 0.3 |
| ¹³ C-1,2,3,6,7,8-H ₆ CDD | 96.7 | 0.5 |
| ¹³ C-1,2,3,7,8,9-H ₆ CDD | 99.1 | 0.4 |
| ¹³ C-1,2,3,4,6,7,8-H ₇ CDD | 99.3 | 1.3 |
| ¹³ C-1,2,3,4,6,7,8,9-O ₈ CDD | 98.6 | 0.2 |
| ¹³ C-2,3,7,8-T ₄ CDF | 99.8 | 0.4 |
| ¹³ C-1,2,3,7,8-P ₅ CDF | 99.6 | 0.4 |
| ¹³ C-2,3,4,7,8-P ₅ CDF | 99.5 | 0.3 |
| ¹³ C-1,2,3,4,7,8-H ₆ CDF | 98.8 | 0.3 |
| ¹³ C-1,2,3,6,7,8-H ₆ CDF | 99.5 | 0.5 |
| ¹³ C-1,2,3,7,8,9-H ₆ CDF | 98.2 | 0.5 |
| ¹³ C-2,3,4,6,7,8-H ₆ CDF | 99.6 | 0.4 |
| ¹³ C-1,2,3,4,6,7,8-H ₇ CDF | 99.8 | 0.3 |
| ¹³ C-1,2,3,4,7,8,9-H ₇ CDF | 99.3 | 0.8 |
| ¹³ C-1,2,3,4,6,7,8,9-O ₈ CDF | 99.6 | 0.8 |
| ¹³ C-1,2,3,4-T ₄ CDD | 99.2 | 0.3 |

Chlorinated dibenzo-p-dioxins and chlorinated dibenzofurans

| Code | Product | Unit |
|-----------|---|------|
| BCR-614S1 | Solution of Polychlorodibenzo-p-dioxins and Polychlorodibenzofurans in n-Nonane | Amp. |
| | Certified values Indicative values | |
| | 2,3,7,8-T ₄ CDD0.000273 mg/kg..... 0.196 µg/L | |
| | 1,2,3,7,8-P ₅ CDD0.001394 mg/kg..... 1.000 µg/L | |
| | 1,2,3,4,7,8-HCDD0.00137 mg/kg..... 0.986 µg/L | |
| | 1,2,3,6,7,8-HCDD0.001391 mg/kg..... 0.998 µg/L | |
| | 1,2,3,7,8,9-HCDD0.001408 mg/kg..... 1.011 µg/L | |
| | 1,2,3,4,6,7,8-HCDD0.00280 mg/kg..... 2.006 µg/L | |
| | 1,2,3,4,6,7,8,9-O ₈ CDD.....0.002787 mg/kg..... 2.000 µg/L | |
| | 2,3,7,8-T ₄ CDF0.000279 mg/kg..... 002 µg/L | |
| | 1,2,3,7,8-P ₅ CDF0.001412 mg/kg..... 1.013 µg/L | |
| | 2,3,4,7,8-P ₅ CDF0.001395 mg/kg..... 1.001 µg/L | |
| | 1,2,3,4,7,8-HCDF.....0.001398 mg/kg..... 1.003 µg/L | |
| | 1,2,3,6,7,8-HCDF.....0.001393 mg/kg..... 1.000 µg/L | |
| | 1,2,3,7,8,9-HCDF.....0.001397 mg/kg..... 1.002 µg/L | |
| | 2,3,4,6,7,8-HCDF.....0.001387 mg/kg..... 0.995 µg/L | |
| | 1,2,3,4,6,7,8-HCDF.....0.002787 mg/kg..... 2.000 µg/L | |
| | 1,2,3,4,7,8,9-HCDF.....0.00278 mg/kg..... 2.00 µg/L | |
| | 1,2,3,4,6,7,8,9-O ₈ CDF0.00279 mg/kg..... 2.00 µg/L | |
| | 13C-2,3,7,8-T ₄ CDD0.01395 mg/kg..... 10.01 µg/L | |
| | 13C-1,2,3,7,8-P ₅ CDD0.0139 mg/kg..... 10.00 µg/L | |
| | 13C-1,2,3,4,7,8-HCDD0.01398 mg/kg..... 10.03 µg/L | |
| | 13C-1,2,3,6,7,8-HCDD0.01393 mg/kg..... 10.00 µg/L | |
| | 13C-1,2,3,7,8,9-HCDD0.01394 mg/kg..... 10.01 µg/L | |
| | 13C-1,2,3,4,6,7,8-HCDD0.0279 mg/kg..... 20.0 µg/L | |
| | 13C-1,2,3,4,6,7,8,9-O ₈ CDD.....0.02786 mg/kg..... 19.99 µg/L | |
| | 13C-2,3,7,8-T ₄ CDF0.01396 mg/kg..... 10.01 µg/L | |
| | 13C-1,2,3,7,8-P ₅ CDF.....0.01393 mg/kg..... 10.00 µg/L | |
| | 13C-2,3,4,7,8-P ₅ CDF.....0.01394 mg/kg..... 10.00 µg/L | |
| | 13C-1,2,3,4,7,8-HCDF.....0.01389 mg/kg..... 9.97 µg/L | |
| | 13C-1,2,3,6,7,8-HCDF.....0.01393 mg/kg..... 9.99 µg/L | |
| | 13C-1,2,3,7,8,9-HCDF.....0.01392 mg/kg..... 9.99 µg/L | |
| | 13C-2,3,4,6,7,8-HCDF.....0.01393 mg/kg..... 9.99 µg/L | |
| | 13C-1,2,3,4,6,7,8-HCDF.....0.02790 mg/kg..... 20.02 µg/L | |
| | 13C-1,2,3,4,7,8,9-HCDF.....0.02786 mg/kg..... 19.99 µg/L | |
| | 13C-1,2,3,4,6,7,8,9-O ₈ CDF0.02787 mg/kg..... 20.00 µg/L | |
| | 13C-1,2,3,4-T ₄ CDD0.01393 mg/kg..... 10.00 µg/L | |
| BCR-614S2 | Solution of Polychlorodibenzo-p-dioxins and Polychlorodibenzofurans in n-Nonane | Amp. |
| | Certified values Indicative values | |
| | 2,3,7,8-T ₄ CDD0.00109 mg/kg..... 0.785 µg/L | |
| | 1,2,3,7,8-P ₅ CDD0.00557 mg/kg..... 4.00 µg/L | |
| | 1,2,3,4,7,8-HCDD0.00549 mg/kg..... 3.94 µg/L | |
| | 1,2,3,6,7,8-HCDD0.00556 mg/kg..... 3.992 µg/L | |
| | 1,2,3,7,8,9-HCDD0.00563 mg/kg..... 4.04 µg/L | |
| | 1,2,3,4,6,7,8-HCDD0.01118 mg/kg..... 8.02 µg/L | |
| | 1,2,3,4,6,7,8,9-O ₈ CDD.....0.01115 mg/kg..... 8.000 µg/L | |
| | 2,3,7,8-T ₄ CDF0.001116 mg/kg..... 0.801 µg/L | |
| | 1,2,3,7,8-P ₅ CDF0.00565 mg/kg..... 4.05 µg/L | |
| | 2,3,4,7,8-P ₅ CDF0.00558 mg/kg..... 4.004 µg/L | |
| | 1,2,3,4,7,8-HCDF.....0.00559 mg/kg..... 4.01 µg/L | |
| | 1,2,3,6,7,8-HCDF.....0.00557 mg/kg..... 3.999 µg/L | |
| | 1,2,3,7,8,9-HCDF.....0.00559 mg/kg..... 4.01 µg/L | |
| | 2,3,4,6,7,8-HCDF.....0.00555 mg/kg..... 3.98 µg/L | |
| | 1,2,3,4,6,7,8-HCDF.....0.01115 mg/kg..... 8.00 µg/L | |
| | 1,2,3,4,7,8,9-HCDF.....0.01114 mg/kg..... 7.99 µg/L | |
| | 1,2,3,4,6,7,8,9-O ₈ CDF0.01116 mg/kg..... 8.01 µg/L | |
| | 13C-2,3,7,8-T ₄ CDD0.01395 mg/kg..... 10.01 µg/L | |
| | 13C-1,2,3,7,8-P ₅ CDD0.0139 mg/kg..... 10.00 µg/L | |
| | 13C-1,2,3,4,7,8-HCDD0.01398 mg/kg..... 10.03 µg/L | |
| | 13C-1,2,3,6,7,8-HCDD0.01393 mg/kg..... 10.00 µg/L | |
| | 13C-1,2,3,7,8,9-HCDD0.01394 mg/kg..... 10.01 µg/L | |
| | 13C-1,2,3,4,6,7,8-HCDD0.0279 mg/kg..... 20.0 µg/L | |
| | 13C-1,2,3,4,6,7,8,9-O ₈ CDD.....0.02786 mg/kg..... 19.99 µg/L | |
| | 13C-2,3,7,8-T ₄ CDF0.01396 mg/kg..... 10.01 µg/L | |
| | 13C-1,2,3,7,8-P ₅ CDF.....0.01393 mg/kg..... 10.00 µg/L | |
| | 13C-2,3,4,7,8-P ₅ CDF.....0.01394 mg/kg..... 10.00 µg/L | |
| | 13C-1,2,3,4,7,8-HCDF.....0.01389 mg/kg..... 9.97 µg/L | |
| | 13C-1,2,3,6,7,8-HCDF.....0.01393 mg/kg..... 9.99 µg/L | |
| | 13C-1,2,3,7,8,9-HCDF.....0.01393 mg/kg..... 9.99 µg/L | |
| | 13C-2,3,4,6,7,8-HCDF.....0.01393 mg/kg..... 9.99 µg/L | |
| | 13C-1,2,3,4,6,7,8-HCDF.....0.02790 mg/kg..... 20.02 µg/L | |
| | 13C-1,2,3,4,7,8,9-HCDF.....0.02786 mg/kg..... 19.99 µg/L | |
| | 13C-1,2,3,4,6,7,8,9-O ₈ CDF0.02787 mg/kg..... 20.00 µg/L | |
| | 13C-1,2,3,4-T ₄ CDD0.01393 mg/kg..... 10.00 µg/L | |

Chlorinated dibenzo-p-dioxins and chlorinated dibenzofurans

| Code | Product | Unit | |
|--|---|---|---|
| BCR-614S3 | Solution of Polychlorodibenzo-p-dioxins and Polychlorodibenzofurans in n-Nonane | Amp. | |
| | | Certified values Indicative values | |
| | 2,3,7,8-T ₄ CDD | 0.00547 mg/kg..... 3.92 µg/L | |
| | 1,2,3,7,8-P ₅ CDD | 0.0279 mg/kg..... 20.0 µg/L | |
| | 1,2,3,4,7,8-HCDD | 0.0275 mg/kg..... 19.7 µg/L | |
| | 1,2,3,6,7,8-HCDD | 0.02781 mg/kg..... 19.96 µg/L | |
| | 1,2,3,7,8,9-HCDD | 0.02817 mg/kg..... 20.21 µg/L | |
| | 1,2,3,4,6,7,8-HCDD | 0.0559 mg/kg..... 40.1 µg/L | |
| | 1,2,3,4,6,7,8,9-O ₈ CDD..... | 0.05574 mg/kg..... 40.00 µg/L | |
| | 2,3,7,8-T ₄ CDF | 0.00558 mg/kg..... 4.003 µg/L | |
| | 1,2,3,7,8-P ₅ CDF | 0.0282 mg/kg..... 20.3 µg/L | |
| | 2,3,4,7,8-P ₅ CDF..... | 0.02790 mg/kg..... 20.02 µg/L | |
| | 1,2,3,4,7,8-HCDF..... | 0.02796 mg/kg..... 20.06 µg/L | |
| | 1,2,3,6,7,8-HCDF..... | 0.02787 mg/kg..... 20.00 µg/L | |
| | 1,2,3,7,8,9-HCDF..... | 0.0279 mg/kg..... 20.04 µg/L | |
| | 2,3,4,6,7,8-HCDF..... | 0.02773 mg/kg..... 19.90 µg/L | |
| | 1,2,3,4,6,7,8-HCDF..... | 0.05574 mg/kg..... 40.00 µg/L | |
| | 1,2,3,4,7,8,9-HCDF..... | 0.0557 mg/kg..... 40.0 µg/L | |
| | 1,2,3,4,6,7,8,9-O ₈ CDF | 0.0558 mg/kg..... 40.0 µg/L | |
| | 13C-2,3,7,8-T ₄ CDD | 0.01395 mg/kg..... 10.01 µg/L | |
| | 13C-1,2,3,7,8-P ₅ CDD | 0.0139 mg/kg..... 10.00 µg/L | |
| | 13C-1,2,3,4,7,8-HCDD | 0.01398 mg/kg..... 10.03 µg/L | |
| | 13C-1,2,3,6,7,8-HCDD | 0.01393 mg/kg..... 10.00 µg/L | |
| | 13C-1,2,3,7,8,9-HCDD | 0.01395 mg/kg..... 10.01 µg/L | |
| | 13C-1,2,3,4,6,7,8-HCDD | 0.0279 mg/kg..... 20.0 µg/L | |
| | 13C-1,2,3,4,6,7,8,9-O ₈ CDD..... | 0.02787 mg/kg..... 20.00 µg/L | |
| | 13C-2,3,7,8-T ₄ CDF | 0.01396 mg/kg..... 10.02 µg/L | |
| | 13C-1,2,3,7,8-P ₅ CDF..... | 0.01393 mg/kg..... 10.00 µg/L | |
| | 13C-2,3,4,7,8-P ₅ CDF..... | 0.01394 mg/kg..... 10.01 µg/L | |
| | 13C-1,2,3,4,7,8-HCDF..... | 0.01390 mg/kg..... 9.97 µg/L | |
| | 13C-1,2,3,6,7,8-HCDF..... | 0.01393 mg/kg..... 10.00 µg/L | |
| | 13C-1,2,3,7,8,9-HCDF..... | 0.01393 mg/kg..... 10.00 µg/L | |
| | 13C-2,3,4,6,7,8-HCDF..... | 0.01393 mg/kg..... 10.00 µg/L | |
| | 13C-1,2,3,4,6,7,8-HCDF..... | 0.02791 mg/kg..... 20.03 µg/L | |
| | 13C-1,2,3,4,7,8,9-HCDF..... | 0.02787 mg/kg..... 20.00 µg/L | |
| | 13C-1,2,3,4,6,7,8,9-O ₈ CDF | 0.02788 mg/kg..... 20.00 µg/L | |
| | 13C-1,2,3,4-T ₄ CDD | 0.01393 mg/kg..... 10.00 µg/L | |
| | BCR-614S4 | Solution of Polychlorodibenzo-p-dioxins and Polychlorodibenzofurans in n-Nonane | Amp. |
| | | | Certified values Indicative values |
| | | 2,3,7,8-T ₄ CDD | 0.0273 mg/kg..... 9.6 µg/L |
| | | 1,2,3,7,8-P ₅ CDD | 0.1393 mg/kg..... 100.0 µg/L |
| | | 1,2,3,4,7,8-HCDD | 0.137 mg/kg..... 98.6 µg/L |
| | | 1,2,3,6,7,8-HCDD | 0.1391 mg/kg..... 99.8 µg/L |
| | | 1,2,3,7,8,9-HCDD | 0.1408 mg/kg..... 101.1 µg/L |
| 1,2,3,4,6,7,8-HCDD | | 0.280 mg/kg..... 200.6 µg/L | |
| 1,2,3,4,6,7,8,9-O ₈ CDD..... | | 0.2787 mg/kg..... 200.0 µg/L | |
| 2,3,7,8-T ₄ CDF | | 0.02789 mg/kg..... 20.02 µg/L | |
| 1,2,3,7,8-P ₅ CDF..... | | 0.1412 mg/kg..... 101.3 µg/L | |
| 2,3,4,7,8-P ₅ CDF..... | | 0.1395 mg/kg..... 100.1 µg/L | |
| 1,2,3,4,7,8-HCDF..... | | 0.1398 mg/kg..... 100.3 µg/L | |
| 1,2,3,6,7,8-HCDF..... | | 0.1393 mg/kg..... 100.0 µg/L | |
| 1,2,3,7,8,9-HCDF..... | | 0.1396 mg/kg..... 100.2 µg/L | |
| 2,3,4,6,7,8-HCDF..... | | 0.1387 mg/kg..... 99.5 µg/L | |
| 1,2,3,4,6,7,8-HCDF..... | | 0.2787 mg/kg..... 200.0 µg/L | |
| 1,2,3,4,7,8,9-HCDF..... | | 0.278 mg/kg..... 200 µg/L | |
| 1,2,3,4,6,7,8,9-O ₈ CDF | | 0.279 mg/kg..... 200 µg/L | |
| 13C-2,3,7,8-T ₄ CDD | | 0.01395 mg/kg..... 10.01 µg/L | |
| 13C-1,2,3,7,8-P ₅ CDD | | 0.0139 mg/kg..... 10.00 µg/L | |
| 13C-1,2,3,4,7,8-HCDD | | 0.01398 mg/kg..... 10.03 µg/L | |
| 13C-1,2,3,6,7,8-HCDD | | 0.01393 mg/kg..... 10.00 µg/L | |
| 13C-1,2,3,7,8,9-HCDD | | 0.01394 mg/kg..... 10.01 µg/L | |
| 13C-1,2,3,4,6,7,8-HCDD | | 0.0279 mg/kg..... 20.0 µg/L | |
| 13C-1,2,3,4,6,7,8,9-O ₈ CDD..... | | 0.02786 mg/kg..... 19.99 µg/L | |
| 13C-2,3,7,8-T ₄ CDF | | 0.01369 mg/kg..... 10.01 µg/L | |
| 13C-1,2,3,7,8-P ₅ CDF..... | | 0.01393 mg/kg..... 10.00 µg/L | |
| 13C-2,3,4,7,8-P ₅ CDF..... | | 0.01394 mg/kg..... 10.00 µg/L | |
| 13C-1,2,3,4,7,8-HCDF..... | | 0.01389 mg/kg..... 9.97 µg/L | |
| 13C-1,2,3,6,7,8-HCDF..... | | 0.01393 mg/kg..... 9.99 µg/L | |
| 13C-1,2,3,7,8,9-HCDF..... | | 0.01392 mg/kg..... 9.99 µg/L | |
| 13C-2,3,4,6,7,8-HCDF..... | | 0.01393 mg/kg..... 9.99 µg/L | |
| 13C-1,2,3,4,6,7,8-HCDF..... | | 0.02790 mg/kg..... 20.02 µg/L | |
| 13C-1,2,3,4,7,8,9-HCDF..... | | 0.02786 mg/kg..... 19.99 µg/L | |
| 13C-1,2,3,4,6,7,8,9-O ₈ CDF | | 0.02787 mg/kg..... 20.00 µg/L | |
| 13C-1,2,3,4-T ₄ CDD | | 0.01393 mg/kg..... 10.00 µg/L | |

Chlorinated dibenzo-p-dioxins and chlorinated dibenzofurans

| Code | Product | Unit | | |
|--------------------------------------|---|---|-------------------|------------|
| BCR-614S5 | Solution of Polychlorodibenzo-p-dioxins and Polychlorodibenzofurans in n-Nonane | Amp. | | |
| | Certified values | Indicative values | | |
| | 2,3,7,8-T ₄ CDD | 0.109 mg/kg..... | 78.5 µg/L | |
| | 1,2,3,7,8-P ₅ CDD | 0.557 mg/kg..... | 400 µg/L | |
| | 1,2,3,4,7,8-HCDD | 0.549 mg/kg..... | 394 µg/L | |
| | 1,2,3,6,7,8-HCDD | 0.556 mg/kg..... | 399.1 µg/L | |
| | 1,2,3,7,8,9-HCDD | 0.563 mg/kg..... | 404 µg/L | |
| | 1,2,3,4,6,7,8-HCDD | 1.118 mg/kg..... | 802 µg/L | |
| | 1,2,3,4,6,7,8,9-O ₈ CDD..... | 1.115 mg/kg..... | 799.9 µg/L | |
| | 2,3,7,8-T ₄ CDF | 0.1116 mg/kg..... | 80.1 µg/L | |
| | 1,2,3,7,8-P ₅ CDF | 0.565 mg/kg..... | 405 µg/L | |
| | 2,3,4,7,8-P ₅ CDF | 0.558 mg/kg..... | 400.4 µg/L | |
| | 1,2,3,4,7,8-HCDF..... | 0.559 mg/kg..... | 401 µg/L | |
| | 1,2,3,6,7,8-HCDF..... | 0.557 mg/kg..... | 399.9 µg/L | |
| | 1,2,3,7,8,9-HCDF..... | 0.559 mg/kg..... | 401 µg/L | |
| | 2,3,4,6,7,8-HCDF..... | 0.555 mg/kg..... | 398 µg/L | |
| | 1,2,3,4,6,7,8-HCDF..... | 1.115 mg/kg..... | 800 µg/L | |
| | 1,2,3,4,7,8,9-HCDF..... | 1.114 mg/kg..... | 799 µg/L | |
| | 1,2,3,4,6,7,8,9-O ₈ CDF | 1.116 mg/kg..... | 801 µg/L | |
| | 13C-2,3,7,8-T ₄ CDD | 0.01395 mg/kg..... | 10.01 µg/L | |
| | 13C-1,2,3,7,8-P ₅ CDD | 0.0139 mg/kg..... | 10.00 µg/L | |
| | 13C-1,2,3,4,7,8-HCDD | 0.01398 mg/kg..... | 10.03 µg/L | |
| | 13C-1,2,3,6,7,8-HCDD | 0.01393 mg/kg..... | 10.00 µg/L | |
| | 13C-1,2,3,7,8,9-HCDD | 0.01395 mg/kg..... | 10.01 µg/L | |
| | 13C-1,2,3,4,6,7,8-HCDD | 0.0279 mg/kg..... | 20.0 µg/L | |
| | 13C-1,2,3,4,6,7,8,9-O ₈ CDD..... | 0.02786 mg/kg..... | 19.99 µg/L | |
| | 13C-2,3,7,8-T ₄ CDF | 0.01396 mg/kg..... | 10.02 µg/L | |
| | 13C-1,2,3,7,8-P ₅ CDF..... | 0.01393 mg/kg..... | 10.00 µg/L | |
| | 13C-2,3,4,7,8-P ₅ CDF..... | 0.01394 mg/kg..... | 10.00 µg/L | |
| | 13C-1,2,3,4,7,8-HCDF..... | 0.01389 mg/kg..... | 9.97 µg/L | |
| | 13C-1,2,3,6,7,8-HCDF..... | 0.01393 mg/kg..... | 9.99 µg/L | |
| | 13C-1,2,3,7,8,9-HCDF..... | 0.01393 mg/kg..... | 9.99 µg/L | |
| | 13C-2,3,4,6,7,8-HCDF..... | 0.01393 mg/kg..... | 9.99 µg/L | |
| | 13C-1,2,3,4,6,7,8-HCDF..... | 0.02790 mg/kg..... | 20.02 µg/L | |
| | 13C-1,2,3,4,7,8,9-HCDF..... | 0.02786 mg/kg..... | 19.99 µg/L | |
| | 13C-1,2,3,4,6,7,8,9-O ₈ CDF | 0.02787 mg/kg..... | 20.00 µg/L | |
| | 13C-1,2,3,4-T ₄ CDD | 0.01393 mg/kg..... | 10.00 µg/L | |
| | Amp. | | | |
| | BCR-614S6 | Solution of Polychlorodibenzofurans in n-Nonane | | |
| | | Certified values | Indicative values | |
| | | 13C-1,2,3,7,8-P ₅ CDF..... | 0.1393 mg/kg..... | 100.0 µg/L |
| | | 13C-1,2,3,7,8,9-HCDF..... | 0.1394 mg/kg..... | 100.0 µg/L |
| | 13C-1,2,3,4,7,8,9-HCDF..... | 0.2787 mg/kg..... | 200.0 µg/L | |
| | Amp. | | | |
| BCR-614S7 | Solution of Polychlorodibenzo-p-dioxins and Polychlorodibenzofurans in n-Nonane | | | |
| | Certified values | Indicative values | | |
| | 13C-2,3,7,8-T ₄ CDD | 0.1395 mg/Kg..... | 100.1 µg/L | |
| | 13C-1,2,3,7,8-P ₅ CDD | 0.139 mg/Kg..... | 99.9 µg/L | |
| | 13C-1,2,3,4,7,8-HCDD | 0.1398 mg/Kg..... | 100.3 µg/L | |
| | 13C-1,2,3,6,7,8-HCDD | 0.1393 mg/Kg..... | 100.0 µg/L | |
| | 13C-1,2,3,4,6,7,8-HCDD | 0.279 mg/Kg..... | 200 µg/L | |
| | 13C-1,2,3,4,6,7,8,9-O ₈ CDD..... | 0.2787 mg/Kg..... | 200.0 µg/L | |
| | 13C-2,3,7,8-T ₄ CDF | 0.1395 mg/Kg..... | 100.1 µg/L | |
| | 13C-2,3,4,7,8-P ₅ CDF..... | 0.1392 mg/Kg..... | 99.9 µg/L | |
| | 13C-1,2,3,4,7,8-HCDF..... | 0.1389 mg/Kg..... | 99.7 µg/L | |
| | 13C-1,2,3,6,7,8-HCDF..... | 0.1394 mg/Kg..... | 100.0 µg/L | |
| | 13C-2,3,4,6,7,8-HCDF..... | 0.1394 mg/Kg..... | 100.0 µg/L | |
| | 13C-1,2,3,4,6,7,8-HCDF..... | 0.2787 mg/Kg..... | 200.0 µg/L | |
| | 13C-1,2,3,4,6,7,8,9-O ₈ CDF | 0.2787 mg/Kg..... | 200.0 µg/L | |
| | BCR-614S8 | Solution of Polychlorodibenzo-p-dioxins in n-Nonane | | |
| Certified values | | Indicative values | | |
| 13C-1,2,3,7,8,9-HCDD | | 0.558 mg/kg..... | 400.5 µg/L | |
| 13C-1,2,3,4-T ₄ CDD | | 0.5574 mg/kg..... | 400.0 µg/L | |
| Amp. | | | | |