

Quality Control Certificate

Product: **Florisil Column**

Product No.: 13807

Lot No.: **723503**

Storage Recommendations: Store the column at room temperature below 25°C

Description: The Florisil Column is part of a 3- or 4-column setup used for the sample preparation of environmental-, food- / feed- and similar matrices with DEXTech systems from LCTech for the analysis of polychlorinated dibenzo-p-dioxins (PCDD), polychlorinated dibenzofurans (PCDF) and polychlorinated biphenyl (PCB) congeners.

Quality Control Release Inspection and Test Specification

Test Procedure: A solvent blank, spiked with quantification standard has been cleaned on a DEXTech Plus system, spiked with recovery standard, evaporated with the D-EVA and has been quantified with a HRGC/HRMS DFS from Thermo Fisher Scientific at a resolution of R > 10000.

Results Blank Value:	PCDD/F-TEQ:	0,3	pg/column						
		(crit: <	0,70	pg/column)					
	dl-PCB-TEQ:	0,015	pg/column						
		(crit: <	0,05	pg/column)					
	Sum Total PCB:	12,9	pg/column						
		(crit: <	300	pg/column)					
Results Recoveries:	PCDD/F	74	to	102	%	(crit: 70	to	120	%)
	PCB	81	to	108	%	(crit: 70	to	120	%)

This is to certify that the Florisil Column, Lot 723503, passed the required test specifications and is released for sale.

date: 26.08.2026 sign.: T. Kehmair

The company LCTech GmbH is certified according to ISO 9001



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Hazards:	NOT FOR HUMAN OR DRUG USE! The Florisil Column is designed and prepared for usage with the Universal/standard & Smart Column and Carbon Column from LCTech and for laboratory use only. This product should only be used by qualified personnel familiar with its potential hazards and trained in the handling of hazardous chemicals. Due care should be exercised to prevent unnecessary human contact or ingestion, all procedures should be carried out with suitable gloves, eye protection, and clothing should be worn at all times. Waste should be disposed according to national and regional regulations.
Quality Control:	All ingredients are traceable to certified lots of our supplier. In addition, any ingredient with a new lot will be checked on contamination and efficiency before releasing for production. Monitoring the ongoing production, several columns are chosen at random day for analysis to check on contamination and efficiency.
Quality Management:	This product was produced using a Quality Management System registered to the ISO 9001:2015 (DEKRA)
Documentation / Data Attached:	table 1 & 2: blankvalues of PCDD/F and PCB table 3 & 4: 13C-Recoveries of PCDD/F and PCB
Analytics	This is to certify that the Florisil Column, Lot , passed the required test specifications and is released for sale.
Remarks	Our suppliers maintain the highest standard of quality, however due to the high temperature necessary for several steps in the production, some small charred particles may be visible within a batch of Florisil or filters without any effect on the clean-up.

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Results:

Lockmass check: No significant disturbances, or indicators for contaminations are detected.

Blanks: n= 6

Table 1: PCDD/F blank

	[pg/column]
2,3,7,8-TCDF	0,05
1,2,3,7,8-PeCDF	0,11
2,3,4,7,8-PeCDF	0,09
1,2,3,4,7,8-HxCDF	0,056
1,2,3,6,7,8-HxCDF	0,092
2,3,4,6,7,8-HxCDF	0,09
1,2,3,7,8,9-HxCDF	0,08
1,2,3,4,6,7,8-HpCDF	0,11
1,2,3,4,7,8,9-HpCDF	0,056
1,2,3,4,6,7,8,9-OCDF	0,35
2,3,7,8-TCDD	0,15
1,2,3,7,8-PeCDD	0,11
1,2,3,4,7,8-HxCDD	0,08
1,2,3,6,7,8-HxCDD	0,12
1,2,3,7,8,9-HxCDD	0,12
1,2,3,4,6,7,8-HpCDD	0,23
1,2,3,4,6,7,8,9-OCDD	0,79

PCDD/F TEQ (2005)	[pg/column]
lower bound	0,3
upper bound	0,3

Table 2: PCB blank

	[pg/column]
PCB-#28	5,82
PCB-#52	4,83
PCB-#101	1,49
PCB-#153	0,3
PCB-#138	0,44
PCB-#180	<0,18
PCB-#81	0,37
PCB-#77	0,525
PCB-#126	0,19
PCB-#169	0,343
PCB-#123	0,12
PCB-#118	0,61
PCB-#114	0,056
PCB-#105	0,26
PCB-#167	0,366
PCB-#156	0,158
PCB-#157	0,1
PCB-#189	0,112

PCB-TEQ	[pg/column]
lower bound	0,015
upper bound	0,015
Sum DIN	12,9

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Table 3: PCDD/F recoveries

		[%]	RSD [%]
PCDD/F 13C Recoveries [%]	2,3,7,8-TCDF	93	4
	1,2,3,7,8-PeCDF	91	2
	2,3,4,7,8-PeCDF	91	3
	1,2,3,4,7,8-HxCDF	91	3
	1,2,3,6,7,8-HxCDF	95	4
	2,3,4,6,7,8-HxCDF	100	4
	1,2,3,7,8,9-HxCDF	102	3
	1,2,3,4,6,7,8-HpCDF	74	5
	1,2,3,4,7,8,9-HpCDF	82	5
	1,2,3,4,6,7,8,9-OCDF	102	7
	2,3,7,8-TCDD	87	3
	1,2,3,7,8-PeCDD	91	4
	1,2,3,4,7,8-HxCDD	99	5
	1,2,3,6,7,8-HxCDD	85	3
	1,2,3,7,8,9-HxCDD	97	3
	1,2,3,4,6,7,8-HpCDD	80	3
	1,2,3,4,6,7,8,9-OCDD	84	6

Table 4: PCB recoveries

		[%]	RSD [%]
PCB 13C Recoveries [%]	PCB-#28	101	2
	PCB-#52	89	2
	PCB-#101	96	2
	PCB-#153	96	1
	PCB-#138	96	1
	PCB-#180	99	1
	PCB-#81	82	1
	PCB-#77	81	1
	PCB-#126	96	1
	PCB-#169	88	1
	PCB-#123	104	1
	PCB-#118	107	1
	PCB-#114	103	2
	PCB-#105	107	2
	PCB-#167	100	1
	PCB-#156	103	1
	PCB-#157	108	1
	PCB-#189	101	2