

Dr.-Hell-Str. 6, 24107 Kiel, Germany  
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**AGROLAB LUFA** Dr.-Hell-Str. 6, 24107 Kiel

INMATRADE AG  
Werttestrasse 4  
Schweiz  
6005 Lucerne  
SCHWEIZ

Date 09.09.2019

Customer no. 10074398

**REPORT 2614639 / 2 - 487760 / 2**

The slash after the order and/or analysis number corresponds to the current version of the test report. This version replaces all previous versions of this test report. All former versions of this report should be destroyed.

Order **2614639 / 2**  
 Sample no. **487760 / 2**  
 Sample acceptance **27.08.2019**  
 Date of sampling **no information**  
 Sample code **Kupfersulfat Pentahydrat CuSO4**  
**Hersteller: CHEMIOLA KIMYA SAN TIC LTD STI**  
**Batch No.: 19-2019. Production date: 06.08.2019**  
 Packaging **Kunststoffbeutel**

Unit Result Declaration Substance Method

**Trace-elements / Heavy metals**

Nickel (Ni)	ppm	<b>3,33</b>		OM	DIN EN 17053 : 2018-03 (mod.)
Copper (Cu)	%	<b>25,2</b>		OM	DIN EN 15621 : 2017-10
Cadmium (Cd)	ppm	<b>&lt;0,20</b>		OM	DIN EN 17053 : 2018-03
Lead (Pb)	ppm	<b>15,7</b>		OM	DIN EN 17053 : 2018-03
Mercury (Hg)	ppm	<b>&lt;0,02</b>		OM	DIN EN 16277 : 2012-09 (mod.)
Arsenic (As)	ppm	<b>&lt;0,50</b>		OM	DIN EN 17053 : 2018-03

**Polychlorinated Dibenzo(p)-dioxines and -furanes**

2,3,7,8-Tetra CDD	ng/kg	<b>&lt;0,020</b>		OM	DIN EN 16215 : 2012-07 (mod.)
1,2,3,7,8-Penta CDD	ng/kg	<b>&lt;0,040<sup>m)</sup></b>		OM	DIN EN 16215 : 2012-07 (mod.)
1,2,3,4,7,8-Hexa CDD	ng/kg	<b>0,053</b>		OM	DIN EN 16215 : 2012-07 (mod.)
1,2,3,6,7,8-Hexa CDD	ng/kg	<b>0,081</b>		OM	DIN EN 16215 : 2012-07 (mod.)
1,2,3,7,8,9-Hexa CDD	ng/kg	<b>0,11</b>		OM	DIN EN 16215 : 2012-07 (mod.)
1,2,3,4,6,7,8-HpCDD	ng/kg	<b>0,69</b>		OM	DIN EN 16215 : 2012-07 (mod.)
Octa CDD	ng/kg	<b>1,6</b>		OM	DIN EN 16215 : 2012-07 (mod.)
2,3,7,8-Tetra CDF	ng/kg	<b>0,060</b>		OM	DIN EN 16215 : 2012-07 (mod.)
1,2,3,7,8-Penta CDF	ng/kg	<b>0,15</b>		OM	DIN EN 16215 : 2012-07 (mod.)
2,3,4,7,8-Penta CDF	ng/kg	<b>0,290</b>		OM	DIN EN 16215 : 2012-07 (mod.)
1,2,3,4,7,8-Hexa CDF	ng/kg	<b>0,30</b>		OM	DIN EN 16215 : 2012-07 (mod.)
1,2,3,6,7,8-Hexa CDF	ng/kg	<b>0,33</b>		OM	DIN EN 16215 : 2012-07 (mod.)
1,2,3,7,8,9-Hexa CDF	ng/kg	<b>&lt;0,050</b>		OM	DIN EN 16215 : 2012-07 (mod.)
2,3,4,6,7,8-Hexa CDF	ng/kg	<b>0,45</b>		OM	DIN EN 16215 : 2012-07 (mod.)
1,2,3,4,6,7,8-Hepta CDF	ng/kg	<b>1,5</b>		OM	DIN EN 16215 : 2012-07 (mod.)
1,2,3,4,7,8,9-Hepta CDF	ng/kg	<b>0,21</b>		OM	DIN EN 16215 : 2012-07 (mod.)
Octa CDF	ng/kg	<b>0,90</b>		OM	DIN EN 16215 : 2012-07 (mod.)
<b>TEQ-WHO (upper-bound, Dioxins)</b>	ng/kg	<b>0,32<sup>xxx5)</sup></b>		OM	Calculation WHO 2005

**Dioxinlike PCB (dl-PCB)**

PCB 77	ng/kg	<b>&lt;3,00</b>		OM	DIN EN 16215 : 2012-07 (mod.)
PCB 81	ng/kg	<b>&lt;0,20</b>		OM	DIN EN 16215 : 2012-07 (mod.)
PCB 105	ng/kg	<b>&lt;50,0</b>		OM	DIN EN 16215 : 2012-07 (mod.)
PCB 114	ng/kg	<b>&lt;4,00</b>		OM	DIN EN 16215 : 2012-07 (mod.)

The parameters reported in this document are accredited according to ISO/IEC 17025:2005. Only not accredited parameters/values are identified by the symbol " \* " .

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	Unit	Result Declaration	Substance	Method
PCB 118	ng/kg	<100	OM	DIN EN 16215 : 2012-07 (mod.)
PCB 123	ng/kg	<2,0	OM	DIN EN 16215 : 2012-07 (mod.)
PCB 126	ng/kg	<0,20	OM	DIN EN 16215 : 2012-07 (mod.)
PCB 156	ng/kg	<10,0	OM	DIN EN 16215 : 2012-07 (mod.)
PCB 157	ng/kg	<2,0	OM	DIN EN 16215 : 2012-07 (mod.)
PCB 167	ng/kg	<5,00	OM	DIN EN 16215 : 2012-07 (mod.)
PCB 169	ng/kg	<0,10	OM	DIN EN 16215 : 2012-07 (mod.)
PCB 189	ng/kg	<2,0	OM	DIN EN 16215 : 2012-07 (mod.)
<b>TEQ-WHO (upper-bound, dl PCB)</b>	ng/kg	<b>0,03<sup>xx5)</sup></b>	OM	Calculation WHO 2005
<b>TEQ-WHO total (upper-bound, Dioxins + dl PCB)</b>	ng/kg	<b>0,35<sup>xx5)</sup></b>	OM	Calculation WHO 2005

xx5) For each single result below the LOQ, the LOQ was used for the calculation.

m) Due to the disturbing influence of the sample matrix, the limit of detection resp. limit of quantitation was increased.

Explanation: "<" or "n.q." represent the fact that the concentration of the analyte is below the limit of quantification (LOQ).

Explanation: OM = on original matter; DM = on dry matter base

Start of testing: 27.08.2019

End of testing: 09.09.2019 (extension after add. ordering and/or plausibility check)

The analytical results are only valid for the delivered sample material. A plausibility check is hardly possible for samples of unknown origin.

Duplication of this document or of parts of it requires the authorization from laboratory. The test results in this test report are displayed in a simplified manner according to the agreement made with you in writing according to the order confirmation. The display is in accordance with ISO/IEC 17025:2005, paragraph 5.10.1.



**AGROLAB LUFA Herr Dr. Hubert Wehage, Tel. 0431/1228-220**  
**Customer Relations Management feed**

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