

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

INMATRADE AG
Werttestrasse 4
Schweiz
6005 Lucerne
SCHWEIZ

Date 19.07.2019
Customer no. 10074398

REPORT 2595742 - 451787

Order **2595742**
Sample no. **451787**
Sample acceptance **12.07.2019**
Date of sampling **no information**
Sample code **Kupfersulfat Pentahydrat CuSO₄**
Hersteller: CHEMIOLA KIMYA SAN TIC LTD STI
Batch No.: 16-2019. Production date: 02.07.2019
Packaging **Kunststoffbeutel**

Unit Result Declaration Substance Method

Trace-elements / Heavy metals

| Substance | Unit | Result | Declaration | Substance | Method |
|--------------|------|--------|-------------|-----------|-------------------------------|
| Nickel (Ni) | ppm | 2,30 | | OM | DIN EN 17053 : 2018-03 (mod.) |
| Copper (Cu) | % | 26,5 | | OM | DIN EN 15621 : 2017-10 |
| Cadmium (Cd) | ppm | <0,20 | | OM | DIN EN 17053 : 2018-03 |
| Lead (Pb) | ppm | 11,2 | | OM | DIN EN 17053 : 2018-03 |
| Mercury (Hg) | ppm | <0,02 | | OM | DIN EN 16277 : 2012-09 (mod.) |
| Arsenic (As) | ppm | <0,50 | | OM | DIN EN 17053 : 2018-03 |

Polychlorinated Dibenzo(p)-dioxines and -furanes

| Substance | Unit | Result | Declaration | Substance | Method |
|--------------------------------|-------|----------------------|-------------|-----------|-------------------------------|
| 2,3,7,8-Tetra CDD | ng/kg | <0,040 ^{m)} | | OM | DIN EN 16215 : 2012-07 (mod.) |
| 1,2,3,7,8-Penta CDD | ng/kg | <0,020 | | OM | DIN EN 16215 : 2012-07 (mod.) |
| 1,2,3,4,7,8-Hexa CDD | ng/kg | <0,050 | | OM | DIN EN 16215 : 2012-07 (mod.) |
| 1,2,3,6,7,8-Hexa CDD | ng/kg | <0,10 ^{wf)} | | OM | DIN EN 16215 : 2012-07 (mod.) |
| 1,2,3,7,8,9-Hexa CDD | ng/kg | <0,050 | | OM | DIN EN 16215 : 2012-07 (mod.) |
| 1,2,3,4,6,7,8-HpCDD | ng/kg | 0,37 | | OM | DIN EN 16215 : 2012-07 (mod.) |
| Octa CDD | ng/kg | 0,38 | | OM | DIN EN 16215 : 2012-07 (mod.) |
| 2,3,7,8-Tetra CDF | ng/kg | <0,020 | | OM | DIN EN 16215 : 2012-07 (mod.) |
| 1,2,3,7,8-Penta CDF | ng/kg | 0,027 | | OM | DIN EN 16215 : 2012-07 (mod.) |
| 2,3,4,7,8-Penta CDF | ng/kg | 0,098 | | OM | DIN EN 16215 : 2012-07 (mod.) |
| 1,2,3,4,7,8-Hexa CDF | ng/kg | <0,050 | | OM | DIN EN 16215 : 2012-07 (mod.) |
| 1,2,3,6,7,8-Hexa CDF | ng/kg | <0,050 | | OM | DIN EN 16215 : 2012-07 (mod.) |
| 1,2,3,7,8,9-Hexa CDF | ng/kg | <0,050 | | OM | DIN EN 16215 : 2012-07 (mod.) |
| 2,3,4,6,7,8-Hexa CDF | ng/kg | 0,14 | | OM | DIN EN 16215 : 2012-07 (mod.) |
| 1,2,3,4,6,7,8-Hepta CDF | ng/kg | 0,39 | | OM | DIN EN 16215 : 2012-07 (mod.) |
| 1,2,3,4,7,8,9-Hepta CDF | ng/kg | <0,10 | | OM | DIN EN 16215 : 2012-07 (mod.) |
| Octa CDF | ng/kg | <0,30 | | OM | DIN EN 16215 : 2012-07 (mod.) |
| TEQ-WHO (upper-bound, Dioxins) | ng/kg | 0,15 ^{xx5)} | | OM | Calculation WHO 2005 |

Dioxinlike PCB (dl-PCB)

| Substance | Unit | Result | Declaration | Substance | Method |
|-----------|-------|--------|-------------|-----------|-------------------------------|
| PCB 77 | ng/kg | <3,00 | | OM | DIN EN 16215 : 2012-07 (mod.) |
| PCB 81 | ng/kg | <0,20 | | OM | DIN EN 16215 : 2012-07 (mod.) |
| PCB 105 | ng/kg | <50,0 | | OM | DIN EN 16215 : 2012-07 (mod.) |
| PCB 114 | ng/kg | <4,00 | | OM | DIN EN 16215 : 2012-07 (mod.) |
| 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.) |

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

Dr.-Hell-Str. 6, 24107 Kiel, Germany
www.agrolab.de

Date 19.07.2019
Customer no. 10074398

REPORT 2595742 - 451787

| | Unit | Result Declaration | Substance | Method |
|--|-------|----------------------------|-----------|-------------------------------|
| 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.) |
| TEQ-WHO (upper-bound, dl PCB) | ng/kg | 0,03^{xx5)} | OM | Calculation WHO 2005 |
| TEQ-WHO total (upper-bound, Dioxins + dl PCB) | ng/kg | 0,18^{xx5)} | 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.

wf) In the present sample the recovery of one or more internal standards is < 50% but > 10%. Consequently a higher measurement uncertainty is expected.

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: 12.07.2019

End of testing: 18.07.2019

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

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