

CN Food Contact Material GB 4806 Declaration of Compliance

Company Endress+Hauser Conducta GmbH+Co. KG
Dieselstraße 24, 70839 Gerlingen, Germany

as a manufacturer of products for liquid analysis declares, that the product

Product Smartec CLD18

Regulations We declare that the above named product conforms to following Chinese National Food Safety Standards as listed below and is therefore **suitable for food contact**:

| | |
|-----------------|---|
| GB 4806.1-2016 | General safety requirements for food contact materials and products |
| GB 31603-2015 | General hygienic specifications for production of food contact materials and articles |
| GB 9685-2016 | Standard for uses of additives in food contact materials and their products |
| GB 4806.7-2023 | Plastic materials and articles in contact with food |
| GB 4806.9-2023 | Metal materials and products for food contact |
| GB 4806.11-2023 | Rubber materials and products for food contact |

Traceability of product in accordance with regulation GB 31603-2015 is assured by means of serial number on sensor.

The following process contact parts are used:

| Process contact part | Extended order code | Material group | Material |
|----------------------|---------------------|----------------|------------------------|
| Sensor housing | CLD18-**** | Plastic | PEEK |
| O-ring | CLD18-**** | Rubber | EPDM |
| | CLD18-*bbb | | |
| Process Connection | bbb≠GCP/LQP/MOP | Metal | Stainless steel 1.4435 |

Conditions of intended use For use in accordance with product specifications.

Specification for intended use or limitations:

- kinds of food: aqueous, acidic, alcoholic with ≤ 50 % EtOH, lacteal,
- repeated use,
- condition of use: using time ≤ 4 hours at T ≤ 121 °C,
- tested ratio of food contact surface to food mass of
 - plastic: 6 dm²/kg,
 - rubber: 2 dm²/kg,
 - metal: 6 dm²/kg.

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Further information

Plastic:

PEEK, Polyether ether ketone, 聚醚醚酮

| Test | Limit | Assessment | Method and conditions of verifying compliance |
|--|--------|------------|---|
| Overall migration [mg/dm²] | | | |
| Acetic acid 4 % 100 °C, 4 h | ≤ 10 | Pass | GB 31604.8-2021 |
| Ethanol 10 % 100 °C, 4 h | ≤ 10 | Pass | GB 31604.8-2021 |
| Ethanol 95 % 60 °C, 6 h | ≤ 10 | Pass | GB 31604.8-2021 |
| Isooctane 60 °C, 4 h | ≤ 10 | Pass | GB 31604.8-2021 |
| Other [mg/kg] | | | |
| <i>KMNO₄ consumption</i> | | | |
| Water 60 °C, 2 h | ≤ 10 | Pass | GB 31604.2-2016 |
| <i>Heavy metal migration (as Pb)</i> | | | |
| Acetic acid 4 % 60 °C, 2 h | ≤ 1 | Pass | GB 31604.9-2016 |
| <i>Migration of 4,4 - Difluorobenzophenone</i> | | | |
| Acetic acid 4 % 100 °C, 4 h | ≤ 0.05 | Pass | LC-MS/MS |
| 40 °C, 10 d | | | |
| Ethanol 10 % reflux, 4 h | | | |
| 40 °C, 10 d | | | |
| Ethanol 95 % 60 °C, 6 h | | | |
| 40 °C, 10 d | | | |
| Isooctane 60 °C, 4 h | ≤ 0.6 | Pass | GB 31604.1-2015 GB 5009.156-2016 |
| 20 °C, 2 d | | | |
| <i>Migration of Hydroquinone</i> | | | |
| Acetic acid 4 % 100 °C, 4 h | ≤ 0.6 | Pass | GB 31604.1-2015 GB 5009.156-2016 |
| 40 °C, 10 d | | | |
| Ethanol 10 % 100 °C, 4 h | | | |
| 40 °C, 10 d | | | |
| Ethanol 95 % 60 °C, 6 h | | | |
| 40 °C, 10 d | | | |
| Isooctane 60 °C, 4 h | ≤ 0.6 | Pass | GB 31604.1-2015 GB 5009.156-2016 |
| 20 °C, 2 d | | | |

The sensory tests for PEEK according to GB 4806.7-2023 Table 1 have been passed.

The PEEK material does not contain any primary aromatic amines according to Table 2 of GB 4806.7-2023.

Rubber:

EPDM, Ethylene propylene diene monomer rubber, 三元乙丙橡胶

| Test | Limit | Assessment | Method and conditions of verifying compliance |
|--|-------|------------|---|
| Overall migration [mg/dm²] | | | |
| Acetic acid 4 % 100 °C, 4 h | ≤ 10 | Pass | GB 31604.8-2016 |
| Ethanol 10 % 100 °C, 4 h | ≤ 10 | Pass | GB 31604.8-2016 |
| Ethanol 50 % reflux, 4 h | ≤ 10 | Pass | GB 31604.8-2016 |
| Other [mg/kg] | | | |
| <i>KMNO₄ consumption</i> | | | |
| Water 60 °C, 0.5 h | ≤ 10 | Pass | GB 31604.2-2016 |
| <i>Heavy metal migration (as Pb)</i> | | | |
| Acetic acid 4 % 60 °C, 0.5 h | ≤ 1 | Pass | GB 31604.9-2016 |

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The sensory tests for EPDM according to GB 4806.11-2023 Table 1 have been passed.

The EPDM material does not contain any primary aromatic amines, N-nitrosamines or products resulting from these according Table 2 of GB 4806.11-2023.

Metal:

Stainless steel, 不锈钢: 1.4435, AISI 316L

| Test | Limit | Assessment | Method and conditions of verifying compliance |
|--|---------|------------|---|
| Content of impurity [%] | | | |
| Lead (Pb) | ≤ 0.01 | Pass | GB/T 37837-2019 |
| Cadmium (Cd) | ≤ 0.01 | Pass | GB/T 37837-2019 |
| Arsenic (As) | ≤ 0.01 | Pass | GB/T 37837-2019 |
| Specific Migration [mg/kg] | | | |
| Arsenic (As) | ≤ 0.002 | Pass | GB 31604.49-2023 |
| Artificial tap water 100 °C, 4h 5g/L Citric acid 100 °C, 4h | | | |
| Cadmium (Cd) | ≤ 0.002 | Pass | GB 31604.49-2023 |
| Artificial tap water 100 °C, 4h 5g/L Citric acid 100 °C, 4h | | | |
| Lead (Pb) | ≤ 0.01 | Pass | GB 31604.49-2023 |
| Artificial tap water 100 °C, 4h 5g/L Citric acid 100 °C, 4h | | | |
| Antimony (Sb) | ≤ 0.04 | Pass | GB 31604.49-2023 |
| Artificial tap water 100 °C, 4h 5g/L Citric acid 100 °C, 4h | | | |
| Chrome (Cr) | ≤ 0.25 | Pass | GB 31604.49-2023 |
| Artificial tap water 100 °C, 4h 5g/L Citric acid 100 °C, 4h | | | |
| Manganese (Mn) | ≤ 2.0 | Pass | GB 31604.49-2023 |
| Artificial tap water 100 °C, 4h 5g/L Citric acid 100 °C, 4h | | | |
| Molybdenum (Mo) | ≤ 0.12 | Pass | GB 31604.49-2023 |
| Artificial tap water 100 °C, 4h 5g/L Citric acid 100 °C, 4h | | | |
| Nickel (Ni) | ≤ 0.14 | Pass | GB 31604.49-2023 |
| Artificial tap water 100 °C, 4h 5g/L Citric acid 100 °C, 4h | | | |

The sensory tests of GB 4806.9-2023 Table 1 were passed.

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Additional information Non-intentionally added substances (NIAS):
To the best of our knowledge, no non-intentionally added substances (NIAS) are present in the product. Furthermore, our evaluation shows no production processes that add or yield not regulated substances or NIAS in a relevant and/or harmful amount. However, we cannot rule out the presence of NIAS in principle.

Remarks The product has to be cleaned before use.

This declaration of compliance is to emphasize that the customer is obliged to test the product with regard to its suitability in the application. This declaration of compliance is only valid for the listed product as supplied to customer.

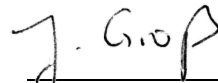
For technical special products (TSP, model designation with modification no.) a declaration of compliance is available upon additional request.

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