

## 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 European Regulations 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 dm<sup>2</sup>/kg,
  - rubber: 2 dm<sup>2</sup>/kg,
  - metal: 6 dm<sup>2</sup>/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
<b>Overall migration [mg/dm<sup>2</sup>]</b>			
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
<b>Other [mg/kg]</b>			
<i>KMNO<sub>4</sub> 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			
Isooctane 60 °C, 4 h	≤ 0.6	Pass	GB 31604.1-2015
20 °C, 2 d			
<i>Migration of Hydroquinone</i>			
Acetic acid 4 % 100 °C, 4 h	≤ 0.6	Pass	GB 5009.156-2016
40 °C, 10 d			
Ethanol 10 % 100 °C, 4 h			
40 °C, 10 d			
Ethanol 95 % 60 °C, 6 h			
Isooctane 60 °C, 4 h	≤ 10	Pass	GB 31604.8-2016
20 °C, 2 d			

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

The PEEK material does not contain any primary aromatic amines according to Table 2 of GB 4806.11-2023.

**Rubber:**

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

Test	Limit	Assessment	Method and conditions of verifying compliance
<b>Overall migration [mg/dm<sup>2</sup>]</b>			
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
<b>Other [mg/kg]</b>			
<i>KMNO<sub>4</sub> 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
<b>Content of impurity [%]</b>			
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
<b>Specific Migration [mg/kg]</b>			
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.

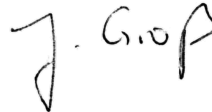
**Remarks**                      The product has to be cleaned before use.

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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