# Declaration of Compliance

Endress+Hauser
People for Process Automation

**Company** **Endress+Hauser Flowtec AG, Christoph Merian – Ring 4, 4153 Reinach, Switzerland**
being the manufacturer, declares that the following materials used in

**Product** **Teqwave H**

| product | Teqwave H, D9HB**-; OD9HB**- | | |
|---|---|---|---|
| **product contact part** | **material group** | **material** | **applicable to order code options** |
| sensor tube | metal | 1.4404/316L | **feature 060:** option: AB |
| seal | elastomer | VMQ (silicone) | **feature 065*:** option: H |
| process connection | metal | 1.4404/316L | **feature 070:** option: AA, DA, DB, DC, DD, DE, FA, IA, IB, SA |

**Spare parts**

| product | Teqwave H, Mounting and Seal Set, DK9H**- | | |
|---|---|---|---|
| **product contact part** | **material group** | **material** | **applicable to order code options** |
| process connection | metal | 1.4404/316L[1)] | **feature 020:** option: AA, DA, DB, DC, DD, DE, FA, IA, IB, SA |
| seal | elastomer | VMQ (silicone)[3)] | **feature 030*:** option: H |

are in conformity with following Chinese Regulations where applicable:

**Regulations**

| | |
|---|---|
| GB 4806.1-2016 | General Safety Requirements for Food Contact Materials and Products |
| GB 9685-2016 | Standard for Uses of Additives in Food Contact Materials and Articles |
| GB 4806.9-2023 | Food Contact Metal Materials and Products |
| 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.

* For further seal options applicable to order code options please refer to Annex II.

**Conditions** For use in accordance with product specifications.

**Specifications for intended use or limitations:**

The material is suitable for the use in applications with the following types of food:

All kinds of food (Aqueous, acidic, alcoholic, lacteal, fatty and oily food)

Duration and temperature of treatment and storage for contact with food:

$T_M \leq 120$ °C, ≤ 1h

Relation of surface in contact with food and volume, the conformity of the material or articles is based upon:

For each component different. Consideration of whole product range.

**Simulants and test conditions**: see Annex for details.

No Primary aromatic amines were detected after migration.

Non-intentionally added substances (NIAS):

To the best of our knowledge, no 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.

This is to emphasize that the customer is obliged to verify the suitability of our products with regard to the intended application. This declaration of conformity is only valid for standard products in their delivery status produced before December 31st, 2026.

Reinach, 01.12.2024
Endress+Hauser Flowtec AG

Dr. M. Lehmann
(Managing Director)

ppa. Dr. C. Jarms
(Head of Division Quality Management)

**Annex I:**

**Stainless steel 1.4404/316L, 不锈钢**

Physicochemical index

| **Test of metal impurities** | **Limit mg/kg** | **Assessment** | **Methods and conditions for verifying compliance** |
|---|---|---|---|
| Arsenic (As) | ≤0.002 | Pass | Test method GB 31604.49-2023<br>5g/l citric acid, 100°C, 2h, 3rd time<br>Tested ratio of food contact surface to mass of food: 6 $dm^2$/kg |
| Cadmium (Cd) | ≤0.002 | Pass | |
| Lead (Pb) | ≤0.01 | Pass | |
| Antimony (Sb) | ≤0.04 | Pass | |

| **Test of alloy components** | **Limit mg/kg** | **Assessment** | **Methods and conditions for verifying compliance** |
|---|---|---|---|
| Aluminium (Al) | ≤1 | Pass | Test method GB 31604.49-2023<br>5g/l citric acid, 100°C, 2h, 3rd time<br>Tested ratio of food contact surface to mass of food: 6 $dm^2$/kg |
| Chromium(Cr) | ≤0.25 | Pass | |
| Cobalt (Co) | ≤0.02 | Pass | |
| Copper (Cu) | ≤4 | Pass | |
| Manganese (Mn) | ≤2.0 | Pass | |
| Molybdenum (Mo) | ≤0.12 | Pass | |
| Nickel (Ni) | ≤0.14 | Pass | |
| Tin (Sn) | ≤100 | Pass | |
| Zinc (Zn) | ≤5 | Pass | |

Material and Sensory requirements according to GB 4806.9-2023 were passed.

**Annex II:**

**Seals**

Seals supplied with the product are supplied by 3rd party.
In lack of a Declaration of Compliance from supplier for EPDM, Endress+Hauser Flowtec AG had carried out migration tests for these parts according to following conditions.

**EPDM 三元乙丙橡胶**

Teqwave H; Feature: 065; Option: F

Spare Part Seal, Feature 030: Option: F

Physicochemical index

| Test | Limit mg/kg | Assessment | Test requirement source | Methods and conditions for verifying compliance |
|---|---|---|---|---|
| **Overall migration, mg/dm2** | | | | |
| 4% (v/v) acetic acid, 100°C, 2h | ≤10 | Pass | GB 4806.11-2023 | Test method GB 31604.8-2021 |
| 10% (v/v) ethanol, reflux, 2h | ≤10 | Pass | | |
| 50% (v/v) ethanol, reflux, 2h | ≤10 | Pass | | |
| **Quantity of KMnO4 consumed, mg/kg** | | | | |
| Distilled water, 60°C, 0.5h | ≤10 | Pass | GB 4806.11-2023 | Test method GB 31604.2-2016 |
| **Heavy metal (as Pb), mg/kg** | | | | |
| 4% (v/v) acetic acid, 60°C, 0.5h | ≤1 | Pass | GB 4806.11-2023 | Test method GB 31604.9-2016 |

**FKM 氟橡胶**

Teqwave H; Feature: 065; Option: G

Spare Part Seal, Feature 030: Option: G

Physicochemical index

| Test | Limit mg/kg | Assessment | Test requirement source | Methods and conditions for verifying compliance |
|---|---|---|---|---|
| **Overall migration, mg/dm2** | | | | |
| 4% (v/v) acetic acid, 100°C, 2h | ≤10 | Pass | GB 4806.11-2023 | Test method GB 31604.8-2021 |
| 10% (v/v) ethanol, reflux, 2h | ≤10 | Pass | | |
| 50% (v/v) ethanol, reflux, 2h | ≤10 | Pass | | |
| **Quantity of KMnO4 consumed, mg/kg** | | | | |
| Distilled water, 60°C, 0.5h | ≤10 | Pass | GB 4806.11-2023 | Test method GB 31604.2-2016 |
| **Heavy metal (as Pb), mg/kg** | | | | |
| 4% (v/v) acetic acid, 60°C, 0.5h | ≤1 | Pass | GB 4806.11-2023 | Test method GB 31604.9-2016 |

**VMQ (Silicone)** 乙烯基甲基硅橡胶

Teqwave H; Feature: 065; Option: H

Spare Part Seal, Feature 030: Option: H

Physicochemical index

| Test | Limit mg/kg | Assessment | Test requirement source | Methods and conditions for verifying compliance |
|---|---|---|---|---|
| **Overall migration, mg/dm2** | | | | |
| 4% (v/v) acetic acid, 100°C, 2h | ≤10 | Pass | GB 4806.11-2023 | Test method GB 31604.8-2021 |
| 10% (v/v) ethanol, reflux, 2h | ≤10 | Pass | | |
| 50% (v/v) ethanol, reflux, 2h | ≤10 | Pass | | |
| **Quantity of KMnO4 consumed, mg/kg** | | | | |
| Distilled water, 60°C, 0.5h | ≤10 | Pass | GB 4806.11-2023 | Test method GB 31604.2-2016 |
| **Heavy metal (as Pb), mg/kg** | | | | |
| 4% (v/v) acetic acid, 60°C, 0.5h | ≤1 | Pass | GB 4806.11-2023 | Test method GB 31604.9-2016 |