



Declaration of Conformity for products in Contact with Food With refer to food safety law China

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ifm electronic gmbh hereby confirms for the units with accessories listed below

Conductivity Sensors:

LDL100^{1),3)}, LDL101^{2),3)}, LDL200³⁾, LDL201³⁾, LDL210³⁾, LDL220³⁾

Compliance with:

- Food Safety Law China
- GB 4806.1-2016 National Food Safety Standard-General Safety Requirements on Food Contact Materials and Articles
- GB 31603-2015 National Food Safety Standard-General Health Code for Production of Food-contacted Materials and Products
- GB 4806.7-2023 National Food Safety Standard - Food Contact Plastic Materials and Articles
- GB 4806.9-2023 National Food Safety Standard – Metal Materials and Articles for Food Contact Use

The surfaces and materials in contact with food may consist of:

1. Stainless steel 1.4404 (X2CrNiMo17-12-2) ¹⁾
2. Stainless steel 1.4435 (X2CrNiMo18-14-3) ²⁾
3. PEEK ³⁾

Compliance is ensured by:

- supplier declarations from the material manufacturers
- supplier declarations from the suppliers of semi-finished products and components
- analysis by independent test institutes
- mathematical worst case calculations based on assumptions of 100% migration of the substances with Specific Migration Limit (SML)

Expected service conditions

The components in contact with food are designed for permanent use in the food and beverage industry. The types of food used as a basis for the assessment are:

- Milk and milk-based products
- Fatty foods
- acidic (3% acetic acid) foods
- aqueous foods
- alcoholic (95% ethanol) foods
- dry foods



The following recurring contact times and temperatures are taken as a basis for liquid up to high viscous food products:

Food in pipes:

- During 2 hours contact time at 150°C, a total of 1,200 liters of medium pass the sensor's plastic in contact with the product (corresponds to the highest requirements for thermal processes of the food processing industry).

Food in tanks and containers:

- 14 days contact time at 100°C and a contact volume of 100 liters (storage and processing of food in Containers and reaction vessels.)

Note: the above service conditions only reflect its migratory conformity instead of technological applicability.

Substances with restrictive requirements, according to Annex A of GB4806.7-2023

CAS No.	Substance name	Limiting conditions
29658-26-2	4,4'-difluorobenzophenone	SML (0.05 mg/kg)
	hydroquinone	SML (0.6 mg/kg)

The above-mentioned limit values for specific migration are clearly undercut for the defined application conditions.

Conformity of overall migration limit

1. The materials meet the requirements of overall migration limit (10mg/dm²), *tested according to GB31604.8*
2. Additionally, the materials meet the stricter overall migration limit for plastic material in contact with foods for infants (60mg/kg).

Additional testing

The following tests were also carried out for the materials mentioned:

- Plastic Materials: GB4806.7-2023, table 1+2
- Metal Materials: GB4806.9-2023, table 2 – 4

Conformity of unintentional additives

Based on the evaluation on collected composition information ifm electronic confirms that the unintentional additives migrated from the product meet the requirements of 2.13 in GB 4806.1-2016.

Conformity of manufacturing practice

Ifm electronic establishes a quality and safety control system according to the requirements of the standard GB 31603-2015 *National Food Safety Standard-General Health Code for Production of Food-contacted Materials and Products* and implements it effectively.

In conclusion, the named products meet the requirements of 3.1~3.7 in GB 4806.1 *General Safety Requirements on Food Contact Materials and Articles*.

**Disclaimer**

This declaration bases on the compositions of the above materials. The issue of the declaration only concerns its conformity with the regulations related to food contact materials instead of its technical applicability.

Signature**Tettnang, 26.09.2024**

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