voestalpine BÖHLER Edelstahl GmbH & Co KG

Declares that the steel grade

BÖHLER M340 ISOPLAST,
hardened at 1000 °C, tempered at 250 °C (twice for 2h)

complies with the Regulation (EC) No 1935/2004 of the European Parliament and of the Council of 27 October 2004 on materials and articles intended to come into contact with food and repealing Directives 80/590/EEC and 89/109/EEC. When used as specified below, the specific migrations according to the guideline


comply with all specific release limits listed therein.

The product is manufactured in compliance with Regulation (EC) No. 2023/2006 of 22 December 2006 on good manufacturing practice for materials and articles intended to come into contact with food.

Usage specifications:
Surface condition: Polished surface
Food contact: Intended to be used with all kinds of foodstuffs (dry, aqueous, acidic, fatty or alcoholic foodstuff) at ambient temperature for any duration and also up to 70 °C for up to two hours.

Test conditions:
Food simulant: Citric acid (5 g/l)
Immersion time: 10 days
Test temperature: 40 °C
Surface to volume ratio: 4.57 dm²/kg food simulant

Supporting Documents:
Approval certificate by AGES "M340 250" (AGES Nr. 16039657)

Validity:
This document is valid until compliance is no longer ensured because of possible changes in regulations as well as possible changes in our product. Please check our website or contact your Böhler partner for updated versions.

Document name: DoC_M340IP_1000_250_acidic_Rev.0.docx
Issued by: Di H. Zunko
Approved by: Di J. Mayerhofer
Version: Rev.0
Date: 28.3.2018
Valid to:

See validity
Anhang 03

Certificate for food contact: M340IP, Tr = 250°C

As ordered this steel sample has been tested and assessed with regard to the requirements of the Council of Europe guideline "Metals and alloys used in food contact materials and articles" (1st edition, 2013).

Materials and articles in contact with food are subject to Regulation (EC) No 1935/2004 on "Materials and articles intended to come into contact with food" and also Regulation (EC) No 2023/2006 on "Good manufacturing practice for materials and articles intended to come into contact with food". For metals, there are currently no specific, legally binding test and evaluation specifications at the European level. Therefore, the Council of Europe guideline "Metals and alloys used in food contact materials and articles" (1st edition, 2013) is used for the examination and evaluation. The selected migration conditions (10 days, 40°C with citric acid 5 g/l) cover a contact with all kinds of foodstuffs (e.g. aqueous, acidic, fatty or alcoholic) at ambient temperature for any duration and also up to 70 °C for a maximum of two hours or a 100 °C up to 15 minutes. For materials and articles for repeated use, the third migration approach is used for the assessment. In addition, the sum of the contents of the first and second migration tests must not exceed 7 times the specific release limit (SRL).

The following toxicologically based SRLs are defined in the guideline "Metals and alloys used in food contact materials and articles" for the individual elements (in mg/kg food or test simulant):

- Aluminum (Al) 5 ppm
- Antimony (Sb) 0.04 ppm
- Arsenic (As) 0.002 ppm
- Barium (Ba) 1.2 ppm
- Beryllium (Be) 0.01 ppm
- Cadmium (Cd) 0.005 ppm
- Chromium (Cr) 0.25 ppm
- Cobalt (Co) 0.02 ppm
- Copper (Cu) 4 ppm
- Iron (Fe) 40 ppm
- Lead (Pb) 0.01 ppm
- Lithium (Li) 0.048 ppm
- Manganese (Mn) 1.8 ppm
- Mercury (Hg) 0.003 ppm
- Molybdenum (Mo) 0.12 ppm
- Nickel (Ni) 0.14 ppm
- Silver (Ag) 0.08 ppm
- Thallium (Tl) 0.0001 ppm
- Tin (Sn) 100 ppm
- Vanadium (V) 0.01 ppm
- Zinc (Zn) 5 ppm

The results for all elements are below these maximum values. The sample M340IP tempering temperature 250°C therefore complies with the requirements of the Council of Europe guideline "Metals and alloys used in food contact materials and articles" (1st edition, 2013) under the test conditions applied.

Dr. DI Christa Hamster

AGES - Austrian Agency for Health and Food Safety