

Declaration of Compliance China and Council of Europe

Damstahl a/s Danmarksvej 28 DK-8660 Skanderborg Phone +45 8794 4000 damstahl@damstahl.com

Reg. No. DK 2325 6118

www.damstahl.dk

On behalf of the entire Damstahl group, we hereby declare that all stainless steel materials supplied by Damstahl fulfil the present legislation regarding materials and objects in contact with food products.

The legislation includes:

- EC directive No. 1935/2004
- EC directive No. 2023/2006: "Good Manufacturing Practice" (GMP)
- Regulation (EC) No 1907/2006 (REACH)
- Directive 2011/65/EU (RoHS; including Directive (EU) 2015/863, Annex II)
- The **NFA 36-711 standard of April 2002** "non packaging steel: Stainless steel intended for use in contact with foodstuffs, products and beverages for human and animal consumption".
- Resolution CM/Res(2013)9 on metals and alloys used in food contact materials and articles; Council of Europe, CoE
- Chinese standards **GB4806.1-2016** and **GB4806.9-2016**, specifying the migration limits in simulated foodstuff solutions.
- The requirements set by the **Council of Europe** (**CoE**; "*Metals and Alloys used in Food Contact; Materials and Articles*"; **1**st **ed. 2013**).

A general requirement is that materials and objects, including active and intelligent materials and objects, are manufactured in accordance with good manufacturing practice so that they, during normal or predictable conditions, do not leak substances into the food products in amounts which may:

- Imply a hazard to human health
- Imply unacceptable changes in the composition of the food products
- Imply a degradation of the organoleptic properties of the food product

Stainless steel grades included:

This declaration includes all stainless steel grades regarded as being suitable for food contact. Damstahl recommends using, as a minimum, austenitic, ferritic or duplex grade (EN 10088-1), with a "Pitting Resistance Equivalent" (PREN) of at least 17.5. For corrosive media and/or higher temperature, stainless steel with a PREN above 23 is recommended. For less corrosion resistant alloys (i.e., martensitic knife alloys), caution is recommended.



Declaration of Compliance - China and Council of Europe

In any case, only stainless steel with a sufficient corrosion resistance to withstand the environment in which it's going to be used should be applied.

For further information with regards to stainless steel, corrosion, manufacturing and surface treatment, we refer to www.damstahl.com.

Certificates

All stainless steel materials supplied by Damstahl are certified according to EN 10204 – 3.1. Damstahl recommends that all stainless steel meant for food product contact is ordered along with a certificate. At first, this ensures the traceability, and, secondly, it's a vital control of the alloying elements.

Chinese migration Testing

With regards to the Chinese requirements, Damstahl has initiated a series of migration tests in full agreement with the conditions mentioned in the Chinese standards GB4806.1-**2016** and **GB4806.9-2016**. These tests were conducted by FORCE Technology, Brøndby, Denmark, a widely recognized *independent* institute, accredited to make the required migration tests.

The results showed that randomly chosen stainless samples of the grades 4307 and 4404 did not leak any of the following metals into the test solution: Chromium (Cr), nickel (Ni), arsenic (As), cadmium (Cd) and lead (Pb). All detections were way below the limits stated in **GB4806.9**.

Testing According to Council of Europe

This test included migration testing in citric acid and artificial tap water, respectively. In all, each analysis comprises the detection of no less than 22 heavy metals (including Fe, Cr, Ni, Mo, Mn and most other metals potentially present in stainless steel).

Three different steel grades were tested (4307, 4404 and 4462), none of which were found to leak any measurable traces of heavy metals into either test media.

On behalf of the Damstahl Group, yours sincerely

Michael Lund

Damstahl Group CEO

Claus Qvist Jessen Chemical Engineer, PhD