22 April 2025

Declaration for Product Compliance

As a leading wholesaler of stainless steel we have set high ambitions and standards to the quality and environmental impact of our products. In this context, it is essential to address the concerns regarding the presence of harmful compounds or chemicals in our traded products.

Stainless steel, a material known for its durability, resistance, and versatility, is produced under very strict standards that limit the inclusion of unwanted compounds. Most of the current regulatory landscape on this topic addresses organic compounds (compounds containing carbon (C)) and heavy chemicals. The melting temperature of stainless steel at approximately 1450 °C insure that all organic compounds will decompose into carbon dioxide (CO_2) and water (H_2O). And with the average upper limit of 0.03% carbon content in the mass of stainless steel it ensures that no organic compounds are added to the molten steel. Actually, Carbon is known as a harmful element in stainless steel as it strongly increases the risk of carbide formation, commonly known as “sensitization”. For this reason, the carbon limit (according to most standards) is only 0.030 %, making it highly undesirable for the steel producers to contaminate the steel with organic compounds.

We advise that customers consult the 3.1 certificate of the material and the corresponding EN-standard to obtain a comprehensive overview of the contents, as the information provided herein is always subject to the details specified in the product's certificate.

Consequently, we can declare that no organic compounds will be present in the stainless steel. Addressing such declaration for compounds on the steel will theoretically require that all transportation and handling should occur in a vacuum, but such conditions are beyond our control. However, it is evident that when delivered at your gate we can comply with below regulations and directives concerning the composition in the steel:

- The REACH Regulation (1907/2006), including updated candidate list pr. 21.01.2025
- The RoHS Directive (2015/863/EU)
- The POPs Regulation (2019/1021/EU)

And declare that following is not intentionally added or used in the production of stainless steel:

- 3TGs and other conflict materials (tin (Sn), tantalum (Ta), tungsten (W), niobium (Nb)[1], gold (Au)) under the U.S. Dodd-Frank Act
- PFAS and PFOS[2]
- SVHC compounds
- Chemicals and organic compounds mentioned under Toxic Substances Control Act (TSCA) restrictions
- Chemicals and organic compounds mentioned under the California Proposition 65 substance list
- Any radioactive substances

[1] This does not apply to few individual alloys such as EN 1.4509 and EN 1.4550 (of which the Niobium content is less that 1%). These alloys only constitute a very low proportion of our product range. Please always consult with the the 3.1 certificate.
[2] See our PFAS/PFOS declaration for more information. Available at https://damstahl.com/en/stainless-knowledge/documents

However, due to the chemical composition of stainless steel, following reservations must be declared regarding:

- Metals mentioned in the Toxic Substances Control Act (TSCA) restrictions such as nickel, chromium and iron. They are all key ingredients in stainless steel, however not as soluble salts, but rather as solid metals with a oxidation state of 0 meaning that they will not decompose or release harmful substances through chemical reactions as stainless steel "passivates" (i.e. forms an insoluble oxide film) which protects the steel against additional corrosion. As long as this passive film is maintained, no harmful substances are leaked into the media.

- Nickel mentioned under the California Proposition 65 substance list as it is a key ingredient in stainless steel but at an oxidation state of 0 meaning that it will not decompose or release harmful substances through chemical reactions.

Above mentioned metals are present (in their elemental form) at different proportions of the mass according to the composition table of each of the standards. The 3.1 certificate declares the composition of the steel, and proper industrial hygiene practices provide guidelines for handling the materials safely. The end-user should always take care of selecting an appropriate steel grade for any specific purpose.

The most frequently used alloying elements in stainless steel are listed below for reference in any further inquiries:

- Iron (Fe)
- Chromium (Cr)
- Nickel (Ni)
- Manganese (Mn)
- Molybdenum (Mo)
- Carbon (C)
- Silicon (Si)
- Phosphorus (P)
- Sulfur (S)
- Titanium (Ti)
- Nitrogen (N)
- Niobium (Nb) [3]

We appreciate the trust our partners place in us. To streamline compliance and regulatory inquiries regarding our stainless steel products, we ask that this document be used as the primary reference. If there are specific details or issues not addressed here, please reach out to us at below e-mails for further assistance.

Thank you for your understanding and cooperation.

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[3] See (1).