

Damstahl GmbH Raiffeisenstr. 6-8 DE-40764 Langenfeld

Phone +49 2173 797 0

dsde@damstahl.com www.damstahl.de

Reg. No. DE 121382220

PFAS/PFOS Declaration

PFAS (*Per- and PolyFluoroAlkyl Substances*) and **PFOS** (*PerFluoroOctaneSulfonic acid*) are two groups of organic compounds sometimes used for a number of applications, such as non-stick frying pans and fire extinguishers.

Recently, these compounds have given rise to a number of cases in which the presence of PFAS/PFOS has been measured in the serum of farm animals or even humans. And, as the chemicals accumulate in the human body, health problems may occur. This has caused an increased awareness of the presence of PFAS/PFOS, and lots of people have started wondering if they are exposed to PFAS/PFOS anywhere. Is there any PFAS/PFOS present in the stainless steel?

Fortunately, no! Both PFAS and PFOS are organic compounds, and no such chemicals are added to the molten steel when making stainless steel. In contrast, elements such as carbon, oxygen and sulphur all have a *negative impact* on the properties of the steel. For this reason, great effort is made to *remove* the unwanted elements from the steel. Should there, by very unlikely accident, be added either PFAS or PFOS to the steel, the high temperature of the molten steel (Approx. 1500 °C) will ensure that both agents are decomposed into their respective elements.

According to an article by Fluoride Alert (<u>Teflon (PTFE) Thermal Decomposition Products</u>. <u>Fluoride Action Network Pesticide Project</u>. (<u>fluoridealert.org</u>)), thermal decomposition of fluorocarbons starts at 200 °C, and even higher temperatures will just accelerate the degradation.

Consequently, there can be no PFAS/PFOS left <u>in</u> the stainless steel. In theory, traces of PFAS/PFOS <u>on</u> the steel may originate from cutting oil, grease end others organic agents, e.g. additives transferred to the steel *after the melting/casting process*. To minimise any possible problems, we therefore recommend that no PFAS/PFOS-containing additives are used when handling the steel.

On behalf of the Damstahl Group

Claus Qvist Jessen Chemical Engineer, PhD