Agreement on global ban of Perfluorohexane-1-sulfonic acid (PFHxS).

TÜV Rheinland LGA Products - Information June 2022

On June 27th, the Council of the European Union adopted Decision (EU) 2022/997, implementing the inclusion of perfluorohexane-1-sulfonic acid (PFHxS), its salts and PFHxS-related compounds to Annex A (elimination) of the Stockholm Convention.

The Council of the European Union thus supports the decision of the Parties to the Stockholm Convention, which agreed on a global ban of the industrial chemical perfluorohexane-1-sulfonic acid (PFHxS) during the last Convention meeting from June 6th to 17th.

The aim is to amend Annex I of the POP Regulation to include perfluorohexane-1-sulfonic acid, its salts and PFHxS-related compounds as substances that will then be subject to certain restrictions. It is expected that these substances will be included in the annex A by the end of 2022.

In 2018, a non-exhaustive list of perfluorohexane-1-sulfonic acid, its salts and PFHxS-related compounds, as well as polymers and mixtures, was already published, containing a total of more than 140 entries.

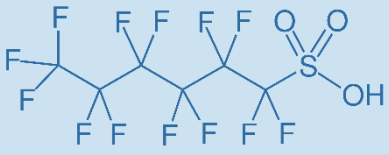
In 2017, perfluorohexane-1-sulfonic acid and its salts were identified as Substances of Very High Concern (SVHC) and added to the REACH Candidate List due to their persistent and bioaccumulative properties.

In Switzerland perfluorohexane-1-sulfonic acid, its salts and PFHxS-related compounds were already added to the national law to phase out the use in mixtures/substances and products.

Perfluorohexane-1-sulfonic acid is used in firefighting foams, metal plating, textiles and leather application as well as upholstery, polishing agents and cleaning/washing agents, coatings, impregnation/ proofing (for protection from damp, fungus, etc.), and within the manufacturing of electronics and semiconductors.

Perfluorohexane-1-sulfonic acid is part of the class of per- and polyfluoroalkyl substances (PFASs) that have come under scrutiny in recent years amid mounting public concern about their persistence in the environment and their presence in water.

Perfluorohexane-1-sulfonic acid (PFHxS)
CAS no.: 355-46-4
EC no.: 206-587-1
Mol. formula: $C_6HF_{13}O_3S$



IMPORTANT NOTE

Although the POP Regulation does not currently impose a restriction, the European Union and Parties to the Stockholm Convention will drive this ban further.

We recommend that suppliers, manufactures, distributors or retailers identify which of their products may contain perfluorohexane-1-sulfonic acid (PFHxS), its salts and PFHxS-related compounds and to identify alternatives and change the affected products accordingly. This will allow a timely search for alternatives and change of technologies.

Please note that similar efforts to regulate and ban per- and polyfluoroalkyl substance in products, substances and mixtures also exist outside the European Union.

OTHER INFORMATIONEN

In recent years, legislation and numerous non-governmental organisations in Europe and the United States have brought the issue of fluorocarbons and perfluorinated compounds to the attention of consumers, brands and retailers. Uniform regulations for these substance class(es) currently exist in Europe in Regulation (EC) No. 1907/2006 REACH (Annex XVII; Candidate List) and Regulation (EU) 2019/1021 (POP Regulation), among others.

Particularly critical are the relatively mobile per- and polyfluoroalkyl substances (PFAS), which are released as by-products from the manufacturing process during application and may still be present in traces in the final products. Their release into the environment should be avoided due to their persistence and possible toxicological effects.

PFAS are a subgroup of fluorocarbons, according to OECD there are more than 4700 substances. Due to their special properties, they have been used in many industrial sectors and also in the household since the 1960s.

CURRENT REGULATION ON PFAS UNDER POP AND EU REACH

The best-known (and most frequently traced) substance groups of PFAS are those with a chain length of eight to fourteen carbon atoms (C8-14) containing different functional groups:

- Perfluorinated alkyl sulfonates - representative: Perfluorooctane sulfonic acid (PFOS)
- Perfluorinated carboxylic acids - representative: Perfluorooctanoic acid (PFOA)

In the European Union PFAS are currently regulated by law under the REACH and POP Regulation:

	Legislation	**Substances & mixtures**	**Coated articles**	**Uncoated articles**
PFOA and its salts	POP Annex I Part A	≤ 25 µg/kg	≤ 25 µg/kg	≤ 25 µg/kg
PFOA-related compounds		≤ ∑ 1000 µg/kg	≤ ∑ 1000 µg/kg	≤ ∑ 1000 µg/kg
PFOS and its derivatives	POP Annex I Part A	≤ 0.001 %	< 1 µg/m²	< 0.1 %*
C9-C14 PFCA and its salts	REACH Annex XVII Entry 68	< ∑ 25 µg/kg**	< ∑ 25 µg/kg	< ∑ 25 µg/kg
C9-C14 PFCA -related compounds		< ∑ 260 µg/kg**	< ∑ 260 µg/kg	< ∑ 260 µg/kg

* Semi-finished products and products
** Specific exemptions applicable

Regulation on PFAS in Switzerland:

	Chemical Risk Reduction Regulation (ChemRRV)	Substances & mixtures	Coated articles	Uncoated articles
PFOA and its salts	RO 2022 162 Annex 1.16, Point 3	≤ 25 µg/kg	≤ 25 µg/kg	≤ 25 µg/kg
PFOA-related compounds		≤ ∑ 1000 µg/kg	≤ ∑ 1000 µg/kg	≤ ∑ 1000 µg/kg
PFOS and its derivatives	RO 2022 162 Annex 1.16, Point 1	< 0.001 %	< 1 µg/m²	< 0.1 %
C9-C14 PFCA and its salts	RO 2022 162 Annex 1.16, Point 3	≤ 25 µg/kg	< 25 µg/kg	< 25 µg/kg
C9-C14 PFCA -related compounds		≤ ∑ 260 µg/kg	< ∑ 260 µg/kg	< ∑ 260 µg/kg
PFHxS and its salts	RO 2022 162 Annex 1.16, Point 2	≤ 25 µg/kg	≤ 25 µg/kg	≤ 25 µg/kg
PFHxS-related compounds		≤ ∑ 1000 µg/kg	≤ ∑ 1000 µg/kg	≤ ∑ 1000 µg/kg

* Specific exemptions are defined for certain uses and can be found in the Chemical Risk Reduction Regulation

Further information on current legal changes can also be found on our homepage at www.tuv.com or https://www.tuv.com/regulations-and-standards/en/.

Further technical information can be obtained from:

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Info box: For additional information about REACH Services please see https://www.tuv.com/world/en/reach.html