

# PFAS-regulations today and tomorrow

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# Is there information in the safety data sheets?

- PFAS content information is often missing in SDSs
- Because the majority are not classified
- It is not considered that PFAS precursors are degraded to persistent substances
- Therefore, it is important to ask and make demands on your supplier



**There are no environmental friendly PFASs!**

## SDS Checklist

This checklist is designed with 4 sections:

- 1 Front Page: information about the company, substance, etc. including some general questions
- 2 Recipient Questions: apply if the company being checked is a recipient, rather than compiler of the SDS
- 3 On-site Checklist: a small number of questions about the SDS that an inspector can check onsite.
- 4 Office-based Checklist: a detailed check of the contents of all 16 Sections and subsections of the SDS

You may wish to print out the first 3 pages (first 3 sections), to fill in on-site and then transfer the data into the electronic version on return to the office. The Office-based Checklist is best filled in directly in the electronic version (on-screen).

The checklist can be saved, printed (see buttons on the last page), and the data entered can be sent by email to a national coordinator (or to yourself), who can compile the results in the Excel spreadsheet (provided separately).

### FRONT PAGE

Company Name	
Company Address	
Company Size (<50, 50-250, >250)	
Individual ID No	
Product Identifier	
SDS/Supplier Identifier	
Inspector/Authority	
Date (dd/mm/yyyy)	

SDS checklist can be downloaded from ECHA's webpage:

<https://echa.europa.eu/sv/regulations/reach/safety-data-sheets/checklist>

# Existing regulations in EU (REACH/CLP\*)

- Harmonised classification and labelling (CLH)
  - PFOS, PFOA, PFNA, PFDA
  - On-going work: PFHpA
- Candidate list (SVHC)
  - PFOA, PFNA, PFDA, PFUnDA, PFDoDA, PFTrDA, PFTeDA, PFHxS, GenX, PFBS
- EU-wide restrictions (Annex XVII, REACH)
  - PFOA\*\*, C6 Siloxanes
  - On-going work: PFNA/PFDA/PFUnDA/ PFDoDA/PFTrDA/PFTeDA ("C9-C14 PFCAs"), PFHxS, PFHxA
- Substance evaluation of 13 PFASs/groups of PFASs
  - All suspected PBT/vPvB substances + other concerns



\*Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH) Regulation ((EC) No 1907/2006)  
Classification, Labelling and Packaging (CLP) Regulation ((EC) No 1272/2008)

\*\* The restrictions on PFOA in the REACH Regulation will cease to apply, replaced by POPs Regulation ((EU) 2019/1021))

# EU's POPs Regulation (EC) No 850/2004 (Stockholm Convention)

- Persistent organic pollutants (POPs):
  - are spread across international borders (via water and air),
  - are difficult to degrade,
  - accumulate in living organisms,
  - expose both humans and animals to serious health risks such as cancer, reproductive disorders and disorders during fetal development.
- PFAS included:
  - PFOS and PFOS-related substances
  - PFOA and PFOA-related substances
  - On-going work: PFHxS
- The Stockholm Convention's requirements for restrictions are introduced into EU legislation in the POPs Regulation ((EU) 2019/1021)



# PFOA restriction

- Came into force on July 4, 2020
- Includes PFOA, PFOA salts and approximately 800 substances
- Limit value of 0.025 mg/kg for PFOA and its salts, and 1 mg/kg for PFOA-related compounds
- Specific derogations to produce pharmaceutical products and for articles already in use before July 4, 2020
- Temporary derogations until July 4, 2023 for some textiles used for occupational safety and for production of polytetrafluoroethylene (PTFE) and polyvinylidene fluoride (PVDF) for some specific applications
- Other derogations exist until July 4, 2025 for photolithography, medical devices, and fire-fighting foams already installed in certain systems



# On-going work in EU

# Restriction of PFAS in fire-fighting foams

- EU-commission has assigned ECHA to develop a restriction proposal for PFAS in fire-fighting foams
- The reasons are i.a. concerns that fire-fighting foams containing PFOA are being replaced by other fluorine-based foams (“regrettable substitution”) and the increasing availability of fluorine-free alternatives
- Plan to submit a proposal in October 2021
- More information on ECHA’s website: <https://echa.europa.eu/registry-of-restriction-intentions/-/dislist/details/0b0236e1856e8ce6>

# Broad PFAS-restriction

- A collaboration between Sweden, Germany, the Netherlands, Denmark & Norway
- Pre-studies during 2020
- Restriction procedure (production and assessment of the restriction proposal) 2021 - 2023
- Possible entry into force of restriction ~ 2025



# Broad PFAS-restriction

Two main objectives:

## 1. PFAS should be managed as a group

- Regulating individual PFAS will take too long
- All PFAS, in themselves or their degradation products, are extremely stable in the environment
- Some PFAS have documented toxicity and concerns are raised for the whole group
- Human and environmental exposure to many PFAS occur and combination effects can be expected
- Avoid regrettable substitution! PFAS that are regulated are often replaced by similar PFAS

## 2. PFAS should only be allowed for essential uses

- Necessary for health and safety or critical to society AND
- Where there are lack of technically/economically available alternatives

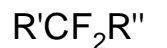
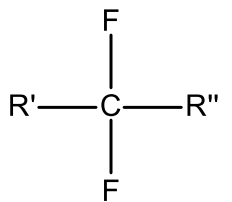
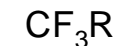
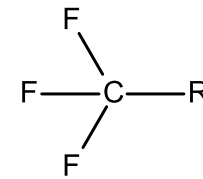
# Broad PFAS-restriction

Wide scoop with the starting point:

*“Fluorinated substances that contain 1 or more C atoms on which all the H substituents have been replaced by F atoms, in such a manner that they contain at least one aliphatic perfluorocarbon moiety such as –C<sub>n</sub>F<sub>2n</sub>–”*

This covers many substances of various structures:

- PFAAs, PFSAs
- Side-chain and backbone fluorinated polymers (e.g., PTFE)
- Hydrofluorocarbons
- Side-chain fluorinated aromatics etc.



# Broad PFAS-restriction

**Includes all uses (except fire-fighting foams), e.g.:**

- Textiles, Leather, Apparel
- Cosmetics and personal care products
- Consumer mixtures
- Lubricants, greases and construction products
- Electronic devices, batteries, fuel cells, semiconductors, energy sector
- Transport (automotive, aviation etc)
- F-gases
- Oil and mining apart from firefighting foams
- Food contact material and paper and board

# Swedish regulations

# Swedish Products register

- In the Products register, KEMI stores information on chemical products that are manufactured in or imported into Sweden and how they are used
- Information on area of use, function, composition, production volumes and health and environmental hazard classification
- Used for statistics, inspections, development of legislations and reducing risks to health and the environment
- Other authorities and organisations, researchers, etc. also uses information from the Products register
- All information that is disclosed is handled in accordance with the Public Access to Information and Secrecy Act (2009: 400)

# Swedish Products register

- Companies in Sweden are obligated to report the content of chemical products to the register
- Applies to products 100 kg / year and companies
- Companies must provide information on all substances in concentrations above 5%
- Substances that are classified as hazardous must be reported regardless of content



# Swedish Products register

- Specific rules for PFAS from January 1, 2019 (KIFS 2017: 7)
- Companies must state whether the products contain intentionally added PFAS substances (yes / no)
- PFAS that are obligated to be registered are
  - Substances which in their molecule contain a perfluorinated carbon chain with at least two carbon atoms and bonding to optional atoms or groups of atoms
- E.g. PTFE are subject to the notification requirement
- Applies regardless of the content. The content itself does not need to be stated
- Companies with a turnover of less than SEK 5 million / year are excluded

Thanks for your attention!

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