

Meeting with stakeholders on PFAS restriction dossier

Short report to be shared with PFAS restriction group and the relevant stakeholder

Date: 3 February 2021

Place: Online (1 hour)

Reporting Member State:

- ☐ NL

Participants (names and organization):

- ☐ Member State: 5.1.2e (RIVM), 5.1.2e (RIVM), 5.1.2e (RIVM).
- ☐ Stakeholder:
 - ☐ 5.1.2e (Arkema)
 - ☐ 5.1.2e (Arkema)
 - ☐ 5.1.2e (Arkema)
- ☐ Hosted by 5.1.2e)

Role of stakeholder/company:

- ☐ Sector organization.

Specific PFAS substance (if applicable):

- ☐ Fluoropolymers, PVDF

Specific subject (if applicable):

- ☐ PVDF fluoropolymer production without PFAS polymerizations aids.

Stakeholder invited to provide the information presented in call for evidence or public consultation? n/a.

Report

On consideration of the ongoing restriction process on PFAS and following the publication of the EU Chemicals Strategy for Sustainability and the Commission PFAS Action Plan, Arkema provided more information on its fluoropolymers. Arkema has developed an innovative technology to produce PVDF fluoropolymers without the use of PFAS polymerization aids, that are produced using only non-persistent non-fluorinated surfactants, see Arkema information document.



ARKEMA Two Pager
Information Document

During the meeting Arkema, explained that they are world's leading company in PVDF production. PVDF is the only fluoropolymer produced by Arkema. Arkema is processing fluorfree polymers as well. Arkema has production plants in France, US and China. Arkema is only supplying PVDF to industrial clients.

To produce PVDF, surfactants are needed. These surfactants used to be PFAS containing surfactants. Over the last 20 years Arkema developed a fluorfree surfactant. This FSF (fluorine surfactant free) has been patented by Arkema and is in use since circa 2008. The use of FSF increased over time from 10% (2008) till 80% nowadays. Arkema aims to produce all PVDF with FSF by 2024. Since Arkema is not involved in the production of other fluoropolymers, like PTFE, they do not know whether FSF can also be applied as surfactant in other fluoropolymer production.

PVDF is used on large scale:

- in electronics (Li-ion battery)
- in coatings (large buildings)
- circa 100-1500 ppm PVDF is added to PE and other polymers for processing efficiency (see also: <https://www.extremematerials-arkema.com/en/markets-and-applications/chemical-industry-and-general-industry/fluoropolymer-processing-aids/>)
- in the gas- and oil industry: pipelines, risers and flow lines in the ocean

During the meeting the RIVM participants asked several questions for clarification.

5.1.2e explained the timing of the restriction process: intended date for inclusion in the RoI (registry of intention) is 1st half 2021 (probably towards summer) and intended date for dossier submission is 1st half 2022. 5.1.2e also indicated that at this moment fluoropolymers are in scope of the dossier work (the scope is still the same as indicated in the call for evidence).