Uddrag fra ANNEX XV RESTRICTION REPORT PROPOSAL FOR A RESTRICTION (version2, 22. Marts 2023)

på EU's Kemikalieagentur (ECHA) hjemmeside her

Tabel 2, rapportens side 53-54 / pdf-filens side 73-74

Table 2. PFAS main applications and sub-uses.

Main applications	Sub-uses (non-exhaustive) of thoroughly investigated PFAS main applications								
Firefighting foam	Covered by separate restriction proposal								
TULAC (Textile, upholstery, leather, apparel and carpets)	Home textiles	Consumer apparel	Professional apparel	Technical textiles	Leather				
Food contact materials and packaging	Consumer cookware	Industrial food and feed production, e.g. in valves and conveyor belts, and for non-stick coatings	Food and feed packaging, including paper & board packaging and plastic packaging						
Metal plating and manufacture of metal products	Hard chrome plating	Decorative plating with chrome, plating on plastics and plating with metals other than chrome	Manufacture of metal products						
Consumer mixtures	Cleaning agents	Waxes and polishes	Dishwashing products	Windscreen treatments and windscreen wiper fluids	Mixtures used for musical instruments				
Cosmetics	Skin care	Toiletries	Hair care	Perfumes and fragrances	Decorative cosmetics				
Ski wax	Kick wax	Glide wax	Ski skin treatment						
Applications of fluorinated gases	Refrigeration	Air conditioning and heat pumps	Foam blowing agents	Solvents	Propellants	Magnesium casting	Fire suppressants	Preservation of cultural paper-based materials	

Main applications	Sub-uses (non-exhaustive) of thoroughly investigated PFAS main applications								
Medical devices	Implantable medical devices	Wound treatment products	Tubes and catheters	Metered Dose Inhalers (MDIs), e.g. as coating and propellant	Cleaning and heat transfer: engineered fluids	Sterilization gases	Diagnostic laboratory testing	Rigid gas permeable (RGP) contact lenses and ophthalmic lenses	Packaging of medical devices
Transport	Body-, hull- and fuselage construction	Sealing applications	Combustion engine systems	Electrical engineering and information technology	Safety equipment (incl. fire prevention and protection)	Hydraulic fluids	HVACR*-systems	Coating and finishings	
Electronics and semiconductors	Wires and cables	Coating, solvents and cleaning	Electronic components	Heat transfer fluids	Advanced semiconductor packaging	Photolithography			
Energy sector	Photovoltaic cells	Wind energy	Coal based power plant	Nuclear power plant	Proton exchange membrane (PEM) fuel cells	Electrolysis technologies (not PEM)	(Lithium-ion) batteries		
Construction products	Roofing	Bridge bearings	Sealings and adhesives	Processing aids and polymer processing aids	Coatings, paints, varnishes and impregnation	Coatings for wind turbine blades and solar cells			
Lubricants	Low viscosity lubricants	Solid/dry-film lubrication	Release-agents	Greases					
Petroleum and mining	Drilling fluids	Well stimulation chemicals	Anti-foaming agents	Water and gas tracers	Metal salts recovery	Lining of piping, seals, sensors, cables, etc.			

TULAC Textiles, Upholstery (polstring), Leather, Apparel (beklædning) and Carpets (tæpper)

Tabel 4, rapportens side 57 / pdf-filens side 77

Table 4. Tonnages and emissions of major use sectors and manufacture for 2020 (sorted by tonnage range)

Application	Tonnage range	Emission range % emitted in manufacturing and use phase	Emission contribution Contribution to total emission
Applications of fluorinated gases	5	2	5
TULAC	5	2	4
Medical devices	5	2	3
Manufacture	5	1	2
Food contact materials and packaging	5	1	1
Transport	5	1	1
Construction products	4	3	2
Electronics and semiconductors	4	2	1
Lubricants	4	2	1
Petroleum and mining	4	1	1
Energy sector	4	1	1
Metal plating and manufacture of metal products	3	1	1
Cosmetics	2	5	1
Consumer mixtures	2	4	1
Ski wax	1	3	1

Table legend					
Tonnage range (t/y)		Emission range (%)		Emission contribution (%)	
1	0 – 10	1	0 – 5	1	0 – 1
2	10 – 100	2	5 – 25	2	1 – 5
3	100 – 1 000	3	25 – 75	3	5 – 10
4	1 000 – 10 000	4	75 – 95	4	10 – 50
5	>10 000	5	>95	5	>0 – 50

(Red.: mørkeste grøn skal være emissions contribution to total emission > 50 %)

TULAC Textiles, Upholstery (polstring), Leather, Apparel (beklædning) and Carpets (tæpper)

Tabel 7 og teksten er fra rapportens sider 76-77 / pdf-filens sider 96-97

As a starting point, the proportionality of a full ban (i.e. Restriction Option 1, henceforth referred to as RO1) of all PFASs is therefore analysed. RO1 is suggested to enter into force after a transition period of 18 months. This most stringent restriction option is then compared to a Restriction Option 2 (RO2), being a ban of all PFASs except, in most cases, time-limited defined use-specific derogations, of either a duration of five or 12 years after the end of the transition period, proposed on the basis of the criteria described below. The duration of the transition period and derogations are summarised in Table 7.

Table 7. Restriction options (ROs) assessed.

Restriction option (RO)	**Transition period before RO takes effect**	**Duration of derogation**
RO1: Full ban	18 months	Not applicable
RO2: Ban with use-specific derogations		5 years after transition period ends
		12 years after transition period ends
		Time-unlimited (only for specific uses)

Under RO2, two types of time-limited derogations are considered. The first one is for a five-year derogation, which is proposed when sufficiently strong evidence is available that

(i) points to the non-existence of technically and economically feasible alternatives on the market at the entry-into-force (EiF) date but where possible alternatives to the PFAS use have already been identified that are however still in the development phase, or

(ii) known alternatives are not available in sufficient quantities on the market at the EiF date or known alternatives cannot be implemented before the transition period ends.

The second one, a 12-year derogation, is proposed when sufficiently strong evidence is available that:

(i) points to the non-existence of technically and economically feasible alternatives on the market at the EiF date, e.g. Research and Development (R&D) efforts did not identify possible PFAS-free alternatives so that it is likely that they will not become available in the near future, or

(ii) certification or regulatory approval of PFAS-free alternatives cannot be achieved within a five-year derogation period.

The Dossier Submitters consider these time periods normally sufficient for industry to take benefit from technical progress and to carry out scientific R&D activities to find and deploy technically and economically feasible alternatives.

For some specific uses there may be reasons of practical nature on the basis of which time-unlimited derogations could be necessary. At submission of the restriction proposal, the Dossier Submitters consider such time-unlimited derogations justified for (i) use of PFASs in refrigerants in HVACR-equipment in buildings where national safety standards and building codes prohibit the use of alternatives (see section 2.4.1.1), (ii) use of PFASs in calibration of measurement instruments and as analytical reference materials (because this is necessary for the targeted analysis of PFASs in the monitoring of these substances in various matrices, see section 2.5), and (iii) use of PFASs as active ingredients (but not as co-formulants) in PPP, BP and human and veterinary MP (see section 2.2.3).

HVACR Heating, Ventilation, Air Conditioning and Refrigeration

PPP Plant protection product (plante-pesticider)

BP Biocidal Product

MP Medicinal Product