

SAE AEROSPACE SECTOR RESPONSE TO ECHA PFAS WITHDRAWAL CONSULTATION ENDING 25TH SEPTEMBER 2023

SAE International

SAE International is the leader in connecting and educating mobility professionals to enable safe, clean, and accessible mobility solutions.

SAE is a global association of more than 128,000 engineers and related technical experts in the aerospace, automotive and commercial vehicle industries. Our core competencies are life-long learning and voluntary consensus standards development. Many of these standards would be affected by a partial or complete ban of per- and polyfluoroalkyl substances (PFASs).

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Introduction

In response to the ECHA consultation on a proposed restriction on the manufacture, placing on the market and the use of PFAS, and the Annex XV Restriction Report Consultation, SAE has consulted its industry membership and provides the following impact statement on the removal of PFAS from the aerospace supply chain.

Impact Statement

This impact statement was prepared by industry representatives from 12 companies across the aviation industry which form the core membership of 190+ SAE committees focused on developing and maintaining consensus standards for parts and materials used across commercial and general aviation aircraft and associated support services.

The aviation industry's use of PFAS in aerospace materials, consumed in tens of thousands of parts and components is due to the need for high performance when operating in extreme and adverse conditions of temperature and pressure, both day and night.

An initial review of our aerospace standards portfolio shows the following products would be impacted by a complete ban on the use of PFAS.

- Airframe bearing-liner material
- Hydraulic hoses and other hydraulic components
- Seals for hydraulic and fuel systems
- Electrical cable insulation
- Engine lubrication products for the installation of fasteners at high temperature
- Cushion materials for harness clamps
- Coatings, adhesion promoters for sealants, sealing gaskets, and release agents.

Based on previous experience, a one for one replacement for PFAS is unlikely to satisfy the technical performance requirements/criteria for existing standard products and materials. Any replacement or

alternative would require a significant amount of testing before new products could be qualified/certified for use on aircraft. PFAS alternatives, if available, could take between 3-5 years to test against existing performance requirements and to revise existing industry consensus standards.

Additionally, aerospace manufacturers would question the need to ban 'non-persistent' fluorinated materials under REACH e.g. Teflon

SAE Technical Submission

(compiled by John Clatworthy/Jonathan Archer -Aerospace Business Development)