

PFAS restriction proposal

Risk to safe transportation of chemicals and liquefied gases in the European and Global supply chain

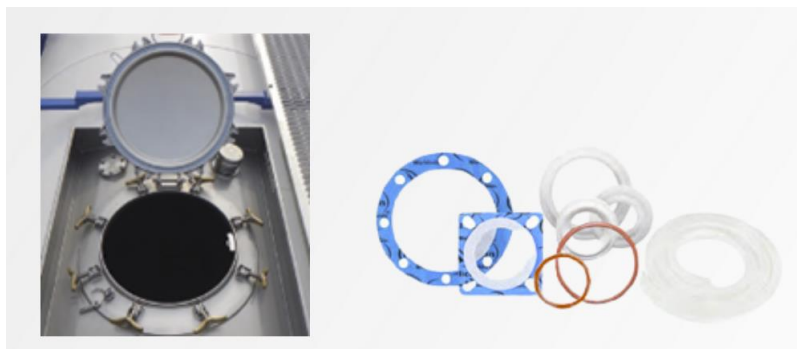
The European transport of chemicals is of major importance to the continent's economy. EU chemical production amounted to 760 billion Euros in 2023. There is an extensive movement of chemicals within and outside Europe to meet industrial and consumer demands. Safety and prevention of leakage during transport is crucial.

Rail, road and intermodal container transport of bulk liquids and gases is a specialist industry. It requires the use of solid-state fluoropolymers because of the critical role of the material in sealing and leak prevention of chemical and liquefied gas tanks.

UIP and ITCO is requesting ECHA to designate solid state fluoropolymers (such as PTFE, PFA, PVDF, FEP, FKM, FFKM) for indefinite derogation.

Key messages:






- **Tank transport of chemicals and liquified gases**, in conformance to UN and RID-ADR regulations for dangerous goods, **should be recognised as an essential sector** of transport within the ECHA PFAS reports.
- **Safety is paramount** and tank transport should be prioritised in the assessment of the PFAS restrictions.
- Solid state fluoropolymers are unique materials used for tank sealing applications to **prevent leakage of liquids and gases during transport** in EU territories.
- **Solid-state fluoropolymers sealings of tank containers and tank wagons should be exempted** from restrictions because no alternative materials provide the requisite properties.
- The **“repair-as-produced” principle should be applied in the transport sector**, with indefinite derogations for spare parts, refurbished or remanufactured parts, equipment, and products already placed on the market.



Sealings of tank containers/wagons are essential for the transportation of dangerous goods

- Solid-state fluoropolymers, (such as PTFE, PFA, PVDF, FEP, FKM, FFKM) are used in sealing elements of the tank valved closure in tank wagons and tank containers and sometimes as coatings inside of the tank.
- Reliable sealing materials are paramount for safety and leak tightness of regulated dangerous goods transport.
- **No alternative sealing element materials**, existing or under development could provide the essential range of properties, including chemical resistance, thermal stability, shrinkage, elastic recovery and vibration resistance.
- Solid-state fluoropolymers enable tank wagons and containers to be efficient multichemical units. The forced use of inferior and less safe sealing materials would lead to restrictive use, and consequential empty runs and inefficiency which would increase environmental emissions. Furthermore, frequent seal and gasket maintenance increases chemical exposure risk to workshop personnel.
- There is **no emission** of PFAS to the environment during the use phase because sealing materials are solid state and incorporated into the tank.
- Mainly during the mandatory RID-ADR maintenance check, sealings are replaced during the full check-up (8 years) or earlier if needed (4 years during intermediate check-up).
- At the end of service life the materials could be separated and disposed safely by the workshops at approved facilities if required. Industry supports developing recycling facilities.

IMPACT OF AN IMMEDIATE PFAS BAN

-  Higher risk of leakages of dangerous goods into the environment
-  Higher emissions of toxic and dangerous products
-  Higher risk to human health in workshops
-  Severe disruption of global chemical and liquefied gas transportation supply chain
-  Inhibits the transport certain products, leading to shortage of products of basic needs

ITCO is the trade association for companies engaged in the global transport by road, rail, and sea of bulk liquids and liquefied gases by intermodal tank container (www.international-tank-container.org).

UIP - International Union of Wagon Keepers, is the European umbrella association of 14 national associations and represents more than 250 private freight wagon leasing companies and Entities in Charge of Maintenance (www.uiprail.org).