

Comments on ECHA's proposed restriction for PFAS

The Japan Bearing Industry Association

We, the Japan Bearing Industrial Association (JBIA), composed of member companies engaged in the manufacture of bearings, have made efforts to promote the features of bearings as environmentally friendly products. In addition, we have supported the EU's attempts to reduce the risks posed by hazardous substances, and have strictly complied with the requirements of EU chemical substance regulations such as REACH.

However, we believe that the proposed restrictions for PFAS needs to be reconsidered because of the following concerns.

1. Lack of appropriate risk assessment for individual PFAS or PFASs subgroups

The proposed restriction for PFAS (Per-and Polyfluoroalkyl) collectively regulates more than 10,000 of organofluorine compounds (PFAS) on the basis that they are persistent. However, each individual PFAS or PFASs subgroups have different properties, and their hazards and risks are different PFAS by PFAS. Persistency common to all PFAS can be rephrased as "high durability" by focusing on its advantages, however, we believe that it is not appropriate to regulate this property alone as an unacceptable risk to human health or the environment. In addition, it is not appropriate to apply the concerns about some fluorinated compounds, such as bioconcentration potential and toxicological effects, by grouping all organofluorine compounds (PFAS) together. We request that each individual substance's risk should be scientifically assessed based on data, and substances can be restricted only if they pose an "unacceptable risk to human health or the environment" in accordance with Article 68 of the REACH.

Furthermore, since the restriction requires the contained amount should be less than 25 ppb for a single type of PFAS, it is essential for compliance whether industry can accurately analyze and measure even extremely small amounts of PFAS volumes. Even if the proposed restriction is implemented as currently announced, we request regulating authority to provide an official method and guidelines for analysis and measurement in order that industry can comply with this regulation.

2. Excessive scope of restrictions

Bearings support the rotating parts that are the central part of machinery, and lower energy consumption by reducing friction. As an extremely important element that determines the function of the entire machine, bearings are used in every product from the products related to regular life, such as washing machines, electronic devices and office machines, to the products related to human's health and safety, such as production of food and medical machine etc.... They are also used in cutting-edge products such as robots and space rockets, not to mention in major industries such as semiconductor manufacturing equipment and automobiles. In order to maintain safe and proper rotational function in such a wide range of operating environments, it is essential to use seals, greases, sliding parts, and other components that contain PFAS with high heat resistance, lubricity, and other properties. However, the areas in which bearings are used are so wide-ranging that it is virtually impossible to evaluate all the effects of each use sector (with sub-uses) as suggested in the proposed restriction. The root cause of this difficulty is, as mentioned above, the fact that more than 10,000 of PFAS are being regulated collectively without proper risk assessment, and therefore, in accordance with Article 68 of the REACH, each individual substance should be scientifically assessed based on data, and the only substances evaluated as an "unacceptable risk to human health or the environment" should be subject to the restriction.

Although PFAS have a variety of excellent performance characteristics, they are extremely expensive, so they are only used in bearings for applications where there is no alternative material

and PFAS must be used. Bearings using PFAS-containing materials are widely utilized in harsh conditions, such as high-temperature atmospheres requiring heat resistance, high-cleanliness atmospheres requiring low dust emissions, vacuum atmospheres requiring low outgassing, and cleaning work environments requiring chemical resistance. Although PFAS are persistent and cannot be recovered, there are no substitutes for them, and as mentioned above, the areas where they are used for safety functions or in harsh conditions are so extensive that even if the proposed restriction is implemented as currently announced, it is appropriate to exempt all bearings, without limiting their use.

3. Socio-economic impact

Article 68 of the REACH requires that any restriction decision shall take into account “the socio-economic impact of the restriction, including the availability of alternatives.” That socio-economic impact includes, according to Annex XVI of the REACH, “the impact on industry (e.g., manufacturers and importers),” “the impact on all other actors in the supply chain, downstream users and associated businesses in terms of commercial consequences, taking into account general trends in the market and technology,” and “wider implications on trade, competition and economic development.” However, the scope of the proposed restriction is so broad that it would be extremely difficult to specifically take into account such considerations. The root cause of this is, as mentioned above, the fact that more than 10,000 of PFAS are being regulated collectively without proper risk assessment, and therefore, in accordance with Article 68 of the REACH, each individual substance should be scientifically assessed based on data, and the only substances evaluated as an “unacceptable risk to human health or the environment” should be subject to the restriction.

If the proposed restriction is implemented as currently announced, trade in essential goods, in which PFAS are used, will be severely restricted and supply chains around the world will be severely disrupted. In addition, if highly durable and indispensable PFAS were to be substituted with non-PFAS materials, it would lead to a decline in the durability of the materials, which in turn would increase the risk to human lives due to reduced product safety, and the life cycle of products would be significantly shortened until they require repair, leading to increased replacement costs and waste. It should be noted that even if alternative substances are currently being developed, it will take a considerable amount of time availability is assured, as subsequent demonstration and evaluation will need to be repeated in both of upstream and downstream industries. Furthermore, for substances for which alternative substances have not yet been identified, future research and development must be conducted involving trial and error, and even a 12-year derogation period may not be sufficient to ensure their feasibility and availability. Even if the restriction remains as it is, we request that a “review clause” that would allow for an extension of the transition period in the event that a suitable alternative substance cannot be practically available by the given review date, including the 18 month transition period, for avoiding social disruption.

4. Transition period for non-vehicle applications

As noted above, PFAS are used in a variety of applications in bearings. For example, in the current restriction, in paragraph 6, number o, “applications affecting the proper functioning related to the safety of transport vehicles, and affecting the safety of operators, passengers or goods” are indicated as potential derogations. However, even in bearings for non-vehicle applications, the use of fluoropolymers, perfluoropolyether, and other materials contributes to safety functions, energy conservation, and a reduction in environmental impact, such as lower CO₂ emissions due to reduced use of electricity and gas. Therefore, we request 12-year derogation period for the use of fluoropolymers, perfluoropolyether, and other substances in non-vehicle applications that are subject to harsh environments or in applications that contribute to energy conservation, as well as a reconsideration of the proposed restrictions at the end of the 12-year period.

5. Spare parts

Ensuring that customers can safely use the machinery over many years requires regular maintenance and servicing. For this, a supply of spare parts is essential. If the proposed restriction

were applied to spare parts, this could lead to the early disposal of machineries that would otherwise be still usable if they could have been serviced. Additionally, the absence of suitable repair and maintenance services may compromise equipment safety. This would make it difficult to achieve the goal of the European Green Deal, which aims to shift to a circular economy where resources circulate in the economic system for as long as possible by using, reusing, recycling, and refurbishing machinery. As mentioned above, bearings are used in a wide range of applications, and even if the proposed restriction is implemented as currently announced, we believe it is necessary to exempt the supply of spare parts from the restriction for all applications.

6. Postponement of the implementation date for articles

Under the current proposed restriction, the implementation date is the same for articles and substances on their own and substances in mixtures. However, considering the broad scope of use of PFAS and the length of the supply chain, it is expected that it will take longer to switch substances and substances in mixtures used for articles than substances and substances in mixtures used for other than articles by the implementation date. As a result, if the implementation date for articles and substances on their own and substances in mixtures were the same, substances and mixtures produced before the implementation date would remain in inventory on the market and in companies, and unused substances and mixtures would have to be disposed of. Therefore, even if the current proposed restriction remains as it is, we believe it is essential to set the implementation date of articles about one year later than the implementation date of substances on their own and substances in mixtures in order to avoid social disruption.

We, the Japan Bearing Industrial Association, remain supportive of the EU's attempts to reduce risks from hazardous substances. We request that the proposed restriction be carefully reviewed in accordance with existing EU procedures and in a pragmatic and legal spirit to ensure that it does not have a negative impact on the social economy.

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