KION GROUP c/o **STILL S.p.A.** | Via A. De Gasperi, 7 | 20045 Lainate | Italy

*Contribution to PFAS consultation submitted by Dr. Sebastian Mueller (KION Group) on behalf of*

*Angelo Zanotti, Managing Director*

*Contact for questions:*
[redacted]*@kiongroup.com*

# Consultation on the restriction of per- and polyfluoroalkyl substances (PFAS)

## 1. Which PFAS substance including CAS-Nr.

FKM CAS-Nr.: 64706-30-5

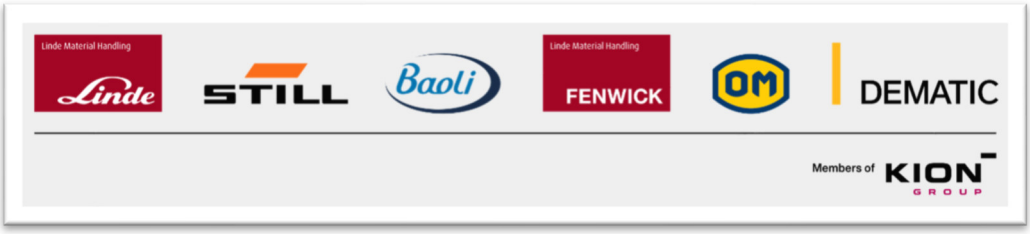
## 2. Request for exemption

Unlimited exemption (RO2) for use of Fluoropolymers and Fluoroelastomers in products for material handling / intralogistics industry (e.g., non-road mobile machinery, large-scale fixed installations), including batteries, accessories, spare parts for the repair, and manufacturing equipment.

## 3. About KION Group

The KION Group is with over 41.000 employees and an annual revenue of 11 billion Euro among the world's leading suppliers of industrial trucks and supply chain solutions. Its portfolio encompasses industrial trucks, such as forklift trucks and warehouse trucks,

as well as integrated automation technology and software solutions for the optimization of supply chains, including all related services. Across more than 100 countries worldwide, the KION Group's logistics solutions improve the flow of material and information within factories, warehouses, and distribution centers. The KION Group, which is included in the MDAX, is the largest manufacturer of industrial trucks in Europe in terms of units sold in 2020. It is also the leading provider of warehouse automation, as measured by revenue in 2019. The following brands belong to KION Group:




The KION Group's world-renowned brands are well established. Measured by revenue in 2019, Dematic is the global leader in warehouse automation, providing a broad range of intelligent supply chain and automation solutions. The Linde and STILL brands serve the premium and higher value segments of the industrial truck market. Baoli focuses on industrial trucks in the lower value and economy segments. In 2020, the regional industrial truck brand Fenwick was one of the leading suppliers of material handling products in France, while OM is among the leading vendors in the Indian market.

With an installed base of more than 1.6 million industrial trucks and over 6,000 installed systems as at December 31, 2020, the KION Group's customers include companies of various sizes in numerous industries on six continents.

## 4. Information about used PFAS substances (as such / in products)

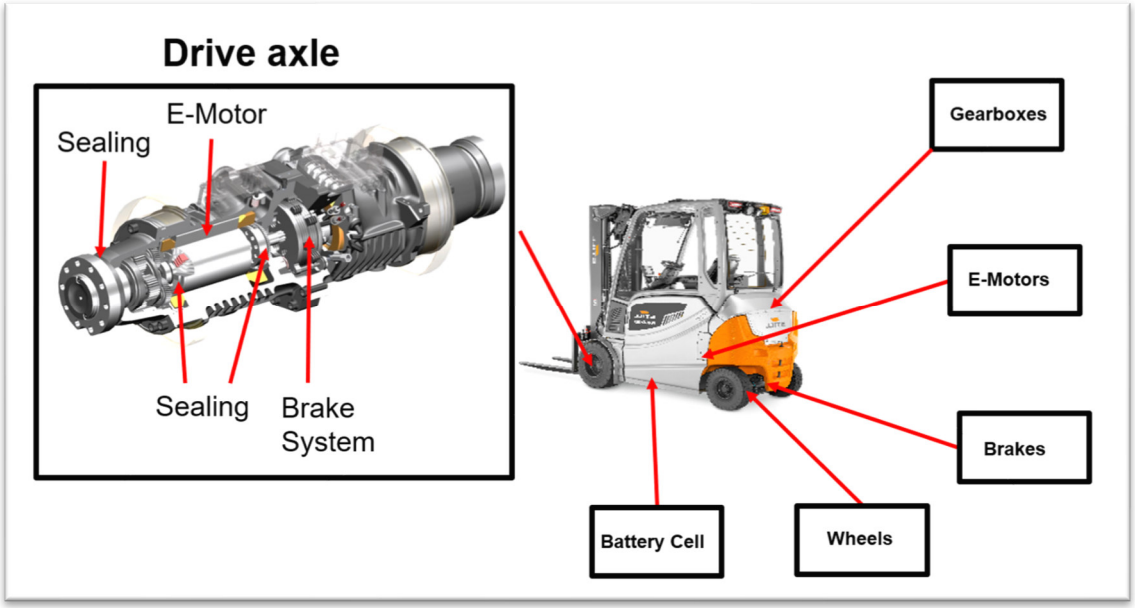
FKM contains strong carbon-fluorine bonds, giving it high chemical, thermal and oxidation resistance and can withstand prolonged contact that would rapidly degrade other rubbers. FKM is particularly valued for its excellent media resistance and outstanding high-temperature properties and is used in our hydraulics as sealings, sliding, sealings in gearboxes, and bearing elements.

## 5. Information about functionality, Product performance criteria, standards, specifications, requirements – role of PFAS

We do not process or manufacture PFAS substances. The components we buy from our suppliers contain PFAS substances. Due to the small installation space and high-power density, relatively high hydraulic oil temperatures have become established in mobile hydraulics. The operating range of oil temperature of our vehicles specified for continuous operation 95°C and short term 120°C. Locally, within the components where the energy conversion takes place, the temperature can rise even higher. Extensive literature research and talks to suppliers let us conclude that except FKM there is no alternative sealing material in the long run that meets these temperature requirements with simultaneous resistance properties.

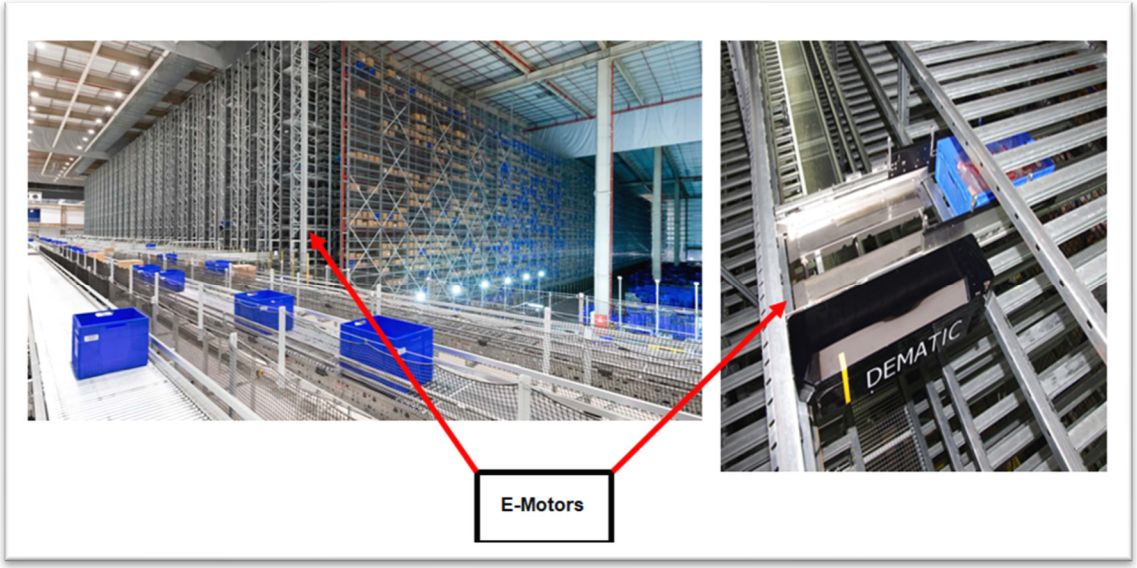
## 5.1 PFAS affected parts of a Forklift truck

The following known parts of a Forklift truck are PFAS affected and are by far not all, as there a lot of information gaps among the supply chain. There are currently **no suitable PFAS-free alternatives** for the identified parts:



## 5.2 PFAS affected parts of an automated storage and retrieval system

The following known parts of an automated storage and retrieval system are PFAS affected and are by far not all, as there a lot of information gaps among the supply chain. There are currently **no suitable PFAS-free alternatives** for the identified parts:



## 6 Relevance of KION for the critical infrastructure

Logistics are a system-relevant supply function for trade, production and the population and represents a central role in every economy. Intralogistic products (e.g. Forklift trucks) are crucial for supplying supermarkets, pharmacies and hospitals as well as private households.

**Material handling equipment is the basis and hence an indispensable part for maintaining the critical infrastructure.**

Without Intralogistic products (e.g. Forklift trucks) the supply of hospitals, pharmacies, supermarkets, public safety (Police) and automotive industry will collapse!

# 7 Consequences of a PFAS ban

## 7.1 Social commitment of KION Group AG

The KION Group and its operating units are involved in various ways around the world. Employees often provide active support - a commitment that the KION Group expressly welcomes as an employer. The range of measures is diverse, and here are just a few examples: For example, LMH EMEA in Germany supported a team of schoolchildren in their journey to the finals of an international robotics competition, where their self-developed robot had to complete intralogistics tasks. KION supports local food banks at various locations. KION Group and its brands are a major employer and economic player at all its sites and contribute to the economic growth of the corresponding region.

## 7.2 Loss of revenue

Our Material handling products contain PFAS in the components and as there are currently **no suitable PFAS-free alternatives**, we assume a loss of 80% in turnover. According to the KION Group AG – Annual Report 2022 the turnover in the EMEA region was 6,8 billion Euro.

The result would be:

6,8 billion Euro -80% -> **expected loss of turnover: 5,44 billion Euro in Europe**

## 7.3 Loss of jobs

Our Material handling products contain PFAS in the components and as there are currently no suitable PFAS-free alternatives, we assume a loss of 80% of jobs:

| | |
|---|---|
| **Employees (FTE Business Segment ITS EMEA)** | **23.660** |
| **Employees (FTE Business Segment SCS EMEA)** | **4.833** |

The result would be:

28.493 FTE -80% -> **expected loss of jobs: 22.794 in Europe**