



Holding statement – 26 April 2022

Microplastics are not a component of PET and do not leach from PET packaging

Improving the collection, sorting and recycling of PET will help to ensure that it does not end up in the environment and contribute to the microplastics issue.

PET packaging protects the quality of food and drink products and ensures that they are safe for consumption. The PET industry is highly regulated at both EU¹ and global level and the sector adheres to strict EU standards at each stage of production – including REACH and the EU's stringent legislation on food contact materials. The health and safety of its entire value chain is the industry's top priority.

If PET bottles and trays are collected and disposed of correctly, the potential to degrade and fragment into microplastic particles which can find their way into the environment via soil, air and water will be removed. The PET industry has consistently called for improved collection and recovery of PET packaging.

The diverse sources of microplastic pollution² are specifically addressed in the European Plastics Strategy³. However, accelerating legislation to promote a wider roll-out of well-functioning collection and recovery schemes for PET represents an important step in removing plastic from the environment and thus minimizing microplastics formation.

The recent finding of microplastics in human blood⁴ was predictable and warrants further scientific investigation into the development of analytical methods. The PET industry supports the establishment of an accepted methodology to quantify and qualify microplastics, currently no such protocol exists, and analyses cannot be reproduced or repeated with confidence.

The PET industry is fully committed to playing its part in minimizing the amount of microplastics in the environment. We continue to reassure our customers and stakeholders that PET plastic is safe and non-toxic.

About micro particulates, microplastics and human interaction

Micro and nano particulates and interaction with humans and animals has been studied for many years and are well understood. Micro particulates constantly enter the body by ingestion or inhalation and are efficiently removed via natural defense mechanisms⁵ from the gut and lung. Similar natural processes quickly remove the few nano particulates that can enter the blood stream⁶. As may be expected there are different toxicological effects with different particulates, all microplastics are a very small portion (0.001%-0.3%) of the total particulate load on the body and are generally non-toxic⁷.

¹ [REACH \(europa.eu\)](http://europa.eu); [Food Contact Materials \(europa.eu\)](http://europa.eu)

² <https://www.ivl.se/download/18.7e136029152c7d48c205d8/1457342560947/C183+Sources+of+microplastic+160307+D.pdf>

³ [Plastics strategy \(europa.eu\)](http://europa.eu)

⁴ Discovery and quantification of plastic particle pollution in human blood
<https://www.sciencedirect.com/science/article/pii/S0160412022001258>

⁵ Invited REVIEWS - Update on Macrophage Clearance of Inhaled Micro- and Nanoparticles Marianne Geiser, Ph.D., Journal Of Aerosol Medicine And Pulmonary Drug Delivery
Volume 23, Number 4, 2010 ^a Mary Ann Liebert, Inc. Pp. 207–217 DOI: 10.1089=jamp.2009.0797

⁶ Passage of Inhaled Particles Into the Blood Circulation in Humans A. Nemmar, et al., Brief Rapid Communications, Received Nov 14, 2001; rev received Dec 11, 2001; accepted Dec 19, 2001

⁷ J. A. Styles & J. Wilson, Comparison between in vitro toxicity of polymer and mineral dusts and their fibrogenicity, Ann. Occup. Hyg., Nov;16(3), 241-50, 1973