



February 12, 2020

Dear Valued Customer,

Lubrizol is committed to ensuring that the European Chemical Agency (ECHA) receives robust scientific information in its deliberation about a possible REACH restriction on the intentional use of “microplastics.” Lubrizol has been actively engaged, both individually and with other stakeholders, in providing scientifically-grounded information to ECHA.

On the January 30, 2019 ECHA submitted a restriction proposal for microplastic particles that are intentionally added to consumer and professional products.¹ The proposed restriction focuses on formulated products and defines microplastics as:

a material consisting of solid polymer-containing particles, to which additives or other substances may have been added, and where $\geq 1\%$ w/w of particles have (i) all dimensions $1\text{nm} \leq x \leq 5\text{mm}$, or (ii), for fibres, a length of $3\text{nm} \leq x \leq 15\text{mm}$ and length to diameter ratio of >3 .²

The intent of the proposed restriction is not to regulate the use of polymers generally, but only where they meet the specific conditions that identify them as being microplastics and where their use will result in releases of microplastics to the environment.

The restriction also focuses on solid particles with all dimensions less than 5mm, or fibers with length $<15\text{mm}$.

Based upon our assessment of ECHA’s January 30, 2019 proposal, Lubrizol’s polymers that are used in personal care and home care applications, including Carbopol® polymers Pemulen® polymers, Carbopol® Aqua CC Polymer, Merquat™ polymers and Avalure™ polymers, do not meet ECHA’s proposed definition for microplastic and would be outside the scope of a REACH restriction on microplastics.

This assessment is consistent with the important differences between Lubrizol’s polymers vs. plastics. Lubrizol’s polymers are rheology modifiers, stabilizers, film forming polymers or aqueous cationic copolymers developed for improved compatibility and clarity in anionic surfactant systems. In formulations, they do not retain a discreet physical form and are not used as scrubbing particles. They are highly dispersible in water.

¹ The complete ECHA proposal can be found at the following link: <https://echa.europa.eu/-/echa-proposes-to-restrict-intentionally-added-microplastics>.

² Polymers that occur in nature that have not been chemically modified (other than by hydrolysis) are excluded, as are polymers that are (bio)degradable.

Recently, Lubrizol conducted a comparative assessment of the physical-chemical properties of acrylate polymer ingredients with solid plastic microbeads to demonstrate the differences between them. In addition, Lubrizol conducted a comprehensive risk assessment under realistic use conditions to evaluate the potential environmental risk of using acrylate polymer ingredients in finished personal care products. The results of both rightly demonstrate that the use of Lubrizol's acrylate polymers in finished personal care products poses no harmful risk to the environment and can be used as additional justification. Lubrizol's work was shared with ECHA, which has acknowledged its usefulness.

As always, Lubrizol stands ready to provide further information to ECHA upon its request and we are closely monitoring its progress. We will continue to provide updates on developments on this important issue.

Please feel free to contact me to discuss the specifics of the experimental testing and the environmental risk assessment of our acrylate polymer ingredients in finished personal care products and our advocacy activities.

We look forward to sharing additional information and data with you.

Elizabeth A. Grove
Director – Sustainability and Compliance

Meera Raghuram
Director, Regulatory Strategy and Policy

Cynthia S. Sullivan
Chief Product Steward

Andrea Vattani
Global Manager Sustainable Products