

SABIC's Inputs to the Public Consultation Comments to Annex XV PFAS Restriction Proposal

Question number 6: Missing uses –: PFAS as an anti-stat in polycarbonate for use in automotive headlamp lenses enabling illumination of surroundings for safe driving.

Executive Summary

SABIC Innovative Plastics B.V., hereinafter “SABIC”, manufactures and supplies plastic and chemical products.

Anti-Static FC-1, hereinafter FC1, was invented by SABIC mainly for the use in polycarbonate (PC) made with a so called melt process (non-phosgene; phosgene process referred to as interfacial process) for the use in automotive headlamp lenses.

Polycarbonate is the main source of material for automotive headlamp lenses in the last decades for its translucent, weight and impact performance to replace glass. Melt-polycarbonate can attract dust that affects the translucency of the headlamp and reduce its appearance.

The benefits of melt-polycarbonate are that the process is solution-free, phosgene-free and pelletisation done directly after polymerization. This continuous process has an economical and environmental benefit.

SABIC invented the use of FC1 at very low levels (0.001 wt%; 10 ppm) to create equal performance in automotive headlamp lenses made from either melt- or interfacial processes. The addition of FC1 is indispensable in the automotive headlamp lens grades portfolio to maintain the same quality our customer's expect. The ban will not only have influence on the product portfolio but also will result in social-economic disturbance for the manufacturing Site and local communities due to the risk of potential production/site closure. FC1 as an antistatic additive is essential for the survival of these production plants. The risk of losing market share will eventually result in loss of labour and eventually closure of production facilities.

For these applications, the additive is indispensable otherwise, negative cost over the whole value chain will originate. FC1 as anti-static additive is superior against the alternatives in efficiency, loading, and function. SABIC investigate alternatives to FC1, however none were deemed successful due to loss in mechanical properties.

As it is used at very low levels (0.001 wt%; 10 ppm) it is nearly not possible to measure the use in imported automotive headlamp lenses or assembled cars and as such producers outside EU would be able to still use it without being able to be detected. This will create an unfair competitive position for EU producers.

Therefore, SABIC requests a 12-year derogation for Anti-Static FC-1, used as an anti-static in melt-polycarbonate for use in automotive headlamp lenses enabling illumination of surroundings for safe driving.