

To: REACH Committee Members

CC: Valentina Bertato, European Commission, DG ENV, Unit B2 Patrizia Tosetti, European Commission, DG GROW, Unit F1

Brussels, 17 April 2023

Why the derogation for biodegradable polymers under REACH should be rejected.

Dear REACH Committee Members,

The Commission's draft regulation to restrict intentionally added microplastics includes a derogation for biodegradable polymers on the basis that these polymers do not contribute to the environmental risks posed by microplastics. However, scientific evidence shows that these derogated synthetic polymers may persist in the environment and pose a risk to environmental health. In order to avoid regrettable substitution of microplastics by biodegradable microplastics, we encourage authorities to not support this derogation (see further details in this joint NGO paper).

First, biodegradable plastics can present similar chemical toxicity as non-biodegradable plastics as they may persist in natural environments. In addition, they can become strong vectors for microorganisms and pollutants.

In addition, standardised tests to assess biodegradability reflect neither realistic use nor existing environmental conditions:

- Variations in temperatures in colder and arid climates or waters, humidity (e.g. in soil) and oxygen availability (e.g. in sediments) are not accounted for. However, even if revised, these tests will always present an oversimplification of real-world conditions. Many variables affecting biodegradation rates, such as nutrient availability, presence or absence of relevant microbial communities (e.g. due to heavy pesticide use) or weather conditions are not considered. Hence, actual biodegradation rates will be much lower than in laboratory test conditions.
- Moreover, microplastics easily move from one environmental compartment to another in real-life. This is why, for groups 4 and 5, the pass criteria should be met for each of the three environmental compartments where the synthetic polymer microparticles are expected to be released, as proposed in RAC opinion¹.

¹ Group 4: (1) soil, (2) fresh water and (3) marine sediment or seawater/sediment interface; group 5: (1) marine, fresh or estuarine water, (2) marine, fresh or estuarine sediment and (3) soil.

- For group 3, the pass criteria (min 70% mineralisation within 14 days) should only be measured as consumed oxygen, as per OECD 302C (Inherent Biodegradability: Modified MITI Test (II)), but not as evolved carbon dioxide.
- Both finished plastic products and individual constituents should be tested for biodegradation and toxicity, whether they are natural polymers or biodegradable ones.
- The modified biodegradability pass criteria for agricultural or horticultural applications in groups 4 and 5 are much lower than for other product categories – for which a 90% pass level of relative biodegradation is required based on the Fertilising Products Regulation (FPR) – and are not justified.

Worse, neither these criteria, nor the decay formulas based on extrapolations were previously assessed by ECHA experts or their reliability evaluated against actual biodegradation data. The FPR does not allow such extrapolations considering biodegradation can start at a high rate but then reach a plateau before complete biodegradation is obtained.

Worse still, testing in fresh/estuarine/marine sediment is missing, even though this is the ultimate sink for different types of plastics, including from mulching films.

Such derogations for agricultural or horticultural applications thus represent an even higher risk of microplastic leakage to the environment and should be stopped.

Consequently, we believe it is important to support the Commission's draft Regulation (EU) amending Annex XVII to the REACH Regulation (EC) No 1907/2006 as regards microplastics, but **oppose to any** derogation for biodegradable polymers under REACH restriction of intentionally added microplastics at the REACH Committee meeting of 26-27 April 2023.

We remain at your disposal for any questions you may have and look forward to the Committee's vote.

Yours sincerely,

Fanny Rateau and Mathias Falkenberg, ECOS – Environmental Coalition on Standards