Oxo Additives Create More Problems Than They Solve

Cortec® Corporation has developed several families of certified compostable film technologies, including Eco Works® and Eco-Corr Film® that are certified commercially compostable per ASTM D 6400 and EN 13432 by BPI and Din Certco. All films that Cortec® manufactures as 'biodegradable' meets these international specifications and go through rigorous 3rd party reviews prior to launching. These Cortec® films are viable solutions for waste diversion goals of communities that want to remove as much material from landfills and incinerators as possible. The latest generations from Cortec® also include renewable content that further improves the sustainability of Cortec’s bioplastic options.

Older technology, marketed as “oxo-degradable”, where chemicals are added to traditional plastics in an attempt to break them into smaller pieces, has been around since the mid 1980s. The following article from ICIS Chemical Business attests, there are several concerns with these oxo-degradable technologies.

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The use of OXO degradable additives will not help Europe move towards sustainable recycling of plastics, according to the trade group representing 80% of recycling capacity

OXO ADDITIVES WILL NOT HELP EUROPE’S RECYCLING

Europe is leading the market in terms of sustainable development, thanks to the abundance of European legislation aiming to protect the environment.

The European Treaty of Lisbon goes even further: it lays down that the EU should aim to "improve the quality of the environment" and not just protect it. New technologies are the one way to achieve that objective. But some technologies bring more drawbacks than advantages for certain uses. This is the case for the OXO degradable additives used in plastics for several reasons.

Firstly, plastics are like an energy bank. Once the energy is stored by a polymerization, one can transform this energy into stable products. Depending on the product cycle, the waste produced can be mechanically recycled or recovered to recuperate the enclosed energy.

Therefore, in both cases the plastic has an energy value. But the use of OXO degradable additives will completely destroy the stored energy of the material.

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It is an economic and environmental nonsense to destroy this value. Moreover, it is the most unsustainable way - together with landfill - to use the valuable oil.

The claim that greenhouse gases are being saved by the use of OXO degradable additives is not a proven fact. The value of plastics that have been mechanically recycled several values can be discussed but all studies show clear emissions savings.

Secondly, joint efforts by all stakeholders to achieve European recycling targets is at risk. The OXO degradable additives will jeopardize mechanical recycling as they will pollute the existing waste streams. The consumer will not differentiate between the different types of plastics and will throw everything in the same bin.

Lack of accepted recyclability standards and overkill in labeling are not presenting a clear message to the consumer.

Consequently, these additives will create an uncontrolled quality of recycled material as they cannot be eliminated or detected. Independent evaluations of the recyclability of these materials is missing.

Thirdly, these additives will not solve the littering issue. One way to tackle littering is through education. Public attention will be diverted from recycling by thinking: "It will degrade by itself." This thinking will damage the recycling rates achieved after decades of efforts from industry, authorities and population.

OXO degradable additives are a hidden actor, not bringing a clear message in finding a sustainable solution to waste generation. European Plastics Recyclers calls on the industry to be watchful not to destroy the achievements of the past years in plastics recycling.

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