

## **'Biodegradable' plastic bags may not be as eco-friendly as thought-**

**The Telegraph UK**

**"Biodegradable" plastic bags used by major supermarkets do not break down as quickly as believed and may not be as environmentally-friendly as they sound, according to Government-funded research in UK.**

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**A study into "oxo-degradable" plastics, often labelled as degradable or biodegradable, found there was uncertainty about their impact on the natural environment.**

The carrier bags, bin bags and flexible packaging, made from common plastics with small amounts of chemicals to speed up their breakdown, are also not suitable for recycling with other plastics, reuse or composting, the research by Loughborough University found.

In the wake of the study funded by the Department for Environment, Food and Rural Affairs, ministers called on the industry not to claim the plastics were better for the environment than more conventional ones.

And the Co-operative said it would not be using carrier bags made from that type of plastic in its stores in future.

Oxo-degradable plastics contain additives to help them degrade into smaller pieces more quickly with the help of heat or light.

They then have to biodegrade, a process caused by microbes.

The report said adding the metal compounds to the plastics did not improve their environmental performance and "potentially gives rise to certain negative effects".

Researchers said it was hard to estimate how long the plastics would take to degrade, though somewhere between two and five years has been suggested if they are left out in the open UK environment.

But they do not degrade in the absence of oxygen so are unlikely to break down in landfill, where much of the plastic would end up.

And the process of biodegrading, which can only happen once the plastic has initially broken into smaller fragments, takes place slowly – many times slower than for compostable bags.

One of the claims made for oxo-degradable plastics is they reduce litter as they are biodegradable, but the report said they would still be lying around for several years before they broke down in the environment.

And there are concerns about the impact the degraded fragments of plastic could have in the natural world, potentially being consumed and building up in insects, animals and fish.

The report said there was no evidence either way as to whether this posed a problem for wildlife.

The study warned that consumers may be confused by labelling the products as "biodegradable" and may put them in with compostable materials – even though they take much longer to break down.

The additives also make the plastics unsuitable for recycling with mainstream plastic packaging and for reuse, particularly for long term storage because they will begin to disintegrate.

The report called for the description of the plastics as "biodegradable" to be replaced with a greater explanation of how exactly it will break down, or the correct method of disposal.

Environment minister Dan Norris said: "The research today clearly shows us that consumers risk being confused by some claims made about oxo-degradable plastics.

"As these plastics cannot be composted, the term 'biodegradable' can cause confusion.

"Incorrect disposal of oxo-degradable plastics has the potential to negatively affect both recycling and composting facilities.

"We hope this research will discourage manufacturers and retailers from claiming that these materials are better for the environment than conventional plastics."

Iain Ferguson, environment manager for the Co-operative Food, said: "We have already decided to stop purchasing carrier bags with the oxo-biodegradable additive and with the support of our customers and staff, we have reduced carrier bag numbers by 60% in the last three years."

Defra said bags and other products made from compostable plastic are tested to make sure they are able to bio-degrade within six months, and are marked with logos showing they are suitable for composting.