

## Additive can make plastic completely biodegradable

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Dubai: An additive to make plastic bottles biodegrade completely is now on the market for UAE water companies to consider in their packaging which could also reduce the amount of plastic waste in landfills.

The oxo-biodegradable additive is similar to what is currently being used in plastic bags to make them degrade quickly and completely once in landfills, or if discarded in nature.

The additive can increase the rate at which polyethylene terephthalate commonly abbreviated to PET, the plastic used for drinking water bottles, breaks down.

UAE residents have the highest per capita consumption of bottled water with 265 litres per year, according to industry experts, creating a lot of plastic waste of which only a minimal amount is recycled.

John James, export manager for Wells Plastics who have created oxo-biodegradable additives under the brand name Reverte, said the plastic bottles would break down completely in 10 years.

"Usually drinking water bottles have a shelf life of between one to two years so essentially the additives used will have a slower reaction. It depends on the breakdown environment but initial research suggests that 10 years is the time it will take to break down," said James.

"The additive is completely food contact safe and there are no concerns. Food packaging which have these additives are touching food all the time," he added.

James added that bottles manufactured with oxo-biodegradable ingredients will be able to be recycled just as ordinary bottles.

"The first priority with plastic bottles is recycling but for some countries where the infrastructure is not there, these additives will offer a solution to manage the waste," he said. The additives are available now from the UK.

Banning plastic bags is too extreme, said James as they are still needed. Supermarkets who introduce a fee for the previously free carrier bags experienced a surge in sales of garbage bags. "Therefore plastic is still being used, but at least with carrier bags they were used twice, garbage bags are just used once," he said.

Additives can help make plastic more user and environmentally friendly, revolutionising the use of plastics essentially by changing it in one way or another.

According to James, oxo-biodegradable additives are being used in garbage bags, food wrappings, as well as vegetable bags freely available in supermarkets.

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