



Total ID Limited

Office 4, Unit 1, Stephen Gray Road
Bromfield Industrial Estate
Mold, Flintshire CH7 1HE
Tel: 0800 588 4000
sales@totalid.co.uk
www.totalid.co.uk

Biodegradable Badge Holders

The term 'Oxo-biodegradable' is a hybridisation of two words, oxidation and biodegradable. It clearly defines a two step process initiated by the Reverte additive to degrade the polymer chain (break up) and make it available for biodegradability within the environment when a treated item has finished its useful life.

Why do we need oxo-biodegradable plastic?

Because thousands of tons of plastic waste are entering the world's environment every day, and will remain there for decades. In no country is it possible to collect all the plastic for recycling or other forms of responsible disposal.

How does it work?

A very small amount of pro-degradant additive is put into the manufacturing process. This breaks the molecular chains in the polymer, and at the end of its useful life the product degrades. It will be consumed by bacteria and fungi after the additive has reduced the molecular weight to a level which permits them access to the carbon and hydrogen.

Does oxo-biodegradable plastic biodegrade, or does it just fragment?

Oxo-biodegradable plastic does just what it says, the clue is in the name – It is called oxo-biodegradable plastic because it is biodegradable. Oxo-biodegradable technology converts plastic products into biodegradable materials at the end of their useful life, and it does this by oxidation in the presence of oxygen. There is nothing misleading about it.

Oxo-biodegradable plastic degrades and biodegrades in the open environment in the same way as nature's wastes, only quicker. What's more, it does so without leaving any toxic residues or fragments of plastic behind. If oxo-biodegradable plastic merely fragmented without biodegrading, CEN (European Committee for Standardization) would not have defined oxo-biodegradability as "degradation resulting from oxidative and cell-mediated phenomena, either simultaneously or successively" and the American, British and French standards organisations would not have included tests for biodegradability in ASTM D6954, BS8472 and ACT51-808.

