



## TECHNICAL INFORMATION SHEET 5

### The Environmental Toxicity of Reverte oxo-biodegradable Products.

"It has been well known for many years that the presence of certain metal ions in polymers such as polyethylene and polypropylene can accelerate the degradation of these polymers.

In the presence of oxygen the metal ions can catalyse the breakdown of the polymer, causing oxidative chain scission and subsequent polymer embrittlement and degradation.

There are a number of products currently on the market which utilise a range of metal salts as the source of the prodegradant ions.

The increasing use of these products has spawned some adverse comments regarding the potential toxicity and build-up of metal catalyst residues following the complete degradation of the polymer substrate. There have also been some opinions voiced regarding the possibility of workplace health and safety issues due to the metal salts utilised in the production of the plastic products containing metal ion prodegradant additives.

These concerns generally centre around the use of additives consisting of salts of metals such as Cobalt, Copper and Manganese.

Wells' "Reverte" range of biodegradable additives and compounds has been formulated without the use of any of these aforementioned metal salts and utilises only metal salts that are regarded as non-toxic.

In fact the metal ion used is widely found in our environment and is generally accepted as essential for human health and well being.

In addition, Plastic films containing Reverte additives have been independently tested under the European Food Contact directive 2002/72/EC and been certified as suitable for food contact.

Reverte products have been designed with the environment in mind and should be used with the confidence that this brings."

  
Andrew Barclay

Technical Director

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