

A BIODEGRADABLE SOLUTION

The Fashion & Consumer section of the May/June 2010 issue of *World Footwear* contained an article on Simple Shoes' BIO.D range of eco-friendly footwear. It also noted the company's quest to find ways to reduce the impact of its manufacturing processes and finished products on the environment.

One of the cleverest developments was the ability of BIO.D shoes to bio-degrade more rapidly than ever before as a result of their synthetic components—including the soles—containing an additive called EcoPure. While this was not central to the original article, it is such a fascinating concept that it warranted a closer look.

EcoPure is produced by an American company called Bio-Tec Environmental, located at Albuquerque, New Mexico. It is referred to as a biodegradable plastic solution and is the company's second generation of this type of additive. It is also said to be five times more effective in accelerating the biodegradation process than its predecessor.

It is actually a full circle biodegradable material made from 100% organic material that can be blended with an EVA resin to produce a master batch pellet. This can then be added to any plastic polymer, including most of those used in the manufacture of footwear to render the plastic biodegradable. Testing under American Standard of Testing and Measurement ASTM D5511, which confirms whether a product will biodegrade when placed into an anaerobic environment such as a landfill, has shown that the additive is indeed biodegradable.

HUNGRY MICROBES

When a plastic polymer product of whatever type is produced by any process, nutrients are extracted that leave it unable to biodegrade. EcoPure adds these nutrients back in, together with certain other organic compounds which, when the plastic is placed in a natural environment such as a landfill, weaken the molecular chain and allow the plastic to biodegrade.

