

Press Release

In response to growing interest in the subject of Degradable Plastics, our polymer suppliers have introduced **Polybatch®DEG 68**, a highly concentrated masterbatch, which can be added to Polyethylene to catalyse degradation under the influence of sunlight and/or heat.

Polybatch®DEG technology has been used for many years for the production of agricultural mulch films, which are required to be degraded at the end of the growing season so that they can be ploughed into the soil.

Films containing **Polybatch®DEG 68** can be stored for extended periods away from direct sunlight or heat sources. Upon exposure to sunlight, the degradation reaction will be initiated. It will then continue, even in the dark, and will be accelerated by heat. Heat alone will also promote the reaction. Tests have shown that a 50 micron Polyethylene film containing 4% **Polybatch®DEG 68** will be degraded to total embrittlement in less than 2 months when stored at 70°C. This temperature is typical of that reached in composting situations. Higher addition rates will increase the speed of degradation. If desired, stabilisers can be added to delay the onset of degradation.

Several academic studies have shown that when the molecular weight of Polyethylene has been reduced sufficiently, it will become digestible by microorganisms in the soil and therefore become truly biodegradable. Therefore the ultimate degradation products of films containing **Polybatch®DEG 68** will be water, carbon dioxide and a small amount of non-toxic mineral matter.

All ingredients of **Polybatch®DEG 68** are positively listed for use in food contact applications under European Directive 2002/72/EC. There are no specific migration limitations.

NWF Swiftpak Limited believes that the use of **Polybatch®DEG 68** can make a contribution towards reducing the problems associated with littering and plastic waste disposal.



Biodegradable and compostable polythene made in the UK