Biodegradable plastic

A scientifically proven technology*



An environmentally responsible solution for your plastic product, film, or packaging needs.



tested according to ASTM D6954





Biodegradable plastic technology



A masterbatch technology which turns ordinary plastic at the end of its useful life, in the presence of oxygen, into a material with a different molecular structure. At the end of the process, it is no longer a plastic, and has changed into a material which is biodegradable (by bacteria and fungi) in the open environment.











Stages of oxo-biodegradation with $d_2 w^{\otimes}$ technology:

- 1. $d_2 w \mathbb{B}$ masterbatch is added at the manufacturing stage.
- **2.** Film containing $d_2w\mathbb{R}$ is extruded and then converted into bags or packaging.
- **3.** The product behaves like conventional plastic during its intended service life.
- **4.** After its service life, the bag or packaging may end up in the open environment.
- **5.** The d₂w® then takes effect and the product begins to degrade in the presence of oxygen.
- **6.** The product will degrade and biodegrade in a continuous, and irreversible process, leaving nothing but carbon dioxide, water and biomass.

Added Value with d₂w[®]

- Only 1% inclusion rate.
- Works with virgin and recycled plastic.
- Works with PE & PP.
- No change to the manufacturing process.
- Product does not lose any of its original properties during its useful life.
- Our customers receive full support from Symphony's Technical and Marketing teams.



Standards – The following standards are used for testing products containing $d_2 w^{\ensuremath{\mathbb{S}}}$

- ✓ American ASTM D6954
- ✓ British Standard 8472
- ✓ United Arab Emirates Standard 5009:2009
- ✓ French Accord T51-808
- ✓ Saudi Standard SASO 2879



Helping to protect the environment from persistent plastic litter.

Disclaimer: The information provided is general information. For specific applications, please consult our Technical Department. Supplies of d_w@ are conditional upon regulatory approval for the purpose(s) concerned in the country or countries concerned. Advetising and labelling are the responsibility of the buyer.



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