## Controlled-Life plastic technology



A masterbatch 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 that process, it is no longer a plastic and has become a material which will biodegrade in the open environment in the same way as a leaf.







## Stages of oxo-biodegradation with d<sub>2</sub>w technology:

- **1.**  $d_2w$  masterbatch is added at the manufacturing stage.
- **2.** Film containing  $d_2w$  is extruded at the factory and is made into bags or packaging.
- **3.** The product behaves like a conventional product during its intended service life.
- **4.** After its service life, the bag or packaging may end up in the open environment.
- **5.** The d<sub>2</sub>w then takes effect and the product begins to degrade in the presence of oxygen.
- **6.** The product eventually biodegrades to nothing more than carbon dioxide, water and biomass.

## Added Value with d<sub>2</sub>w

- Requires only 1% inclusion rate.
- Works with virgin and recycled plastic.
- Works with PE, PP and PS.
- No change to the manufacturing process.
- 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 $d_2w$

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



Protecting the environment with controlled-life plastic.



**Disclaimer:** The information provided is general information. For specific applications, please consult our Technical Department. Supplies of  $d_2w$  are conditional upon regulatory approval for the purpose(s) concerned in the country or countries concerned.

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