

# d<sub>2</sub>w<sup>®</sup> Biodegradable

A scientifically proven plastic technology



d<sub>2</sub>w is a masterbatch technology which converts ordinary plastic, at the end of its useful life 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 waxy material which is biodegradable, by bacteria and fungi, in the open environment.

With over 20 years of scientific research behind it, d<sub>2</sub>w biodegradable technology is perfect to use with most types of single-use plastics, including bags, packaging films and P.E. bottles.

## Tested to the following international standards:

American Standard: ASTM D6954  
British Standard: BS 8472  
British PAS 9017: 2020  
French Accord: T51-808  
Saudi Standard: SASO 2879  
UAE Standard: 5009:2009  
Mexican Standard: NMXE-E-288-NYCE

Scan the QR code to see d<sub>2</sub>w in action:

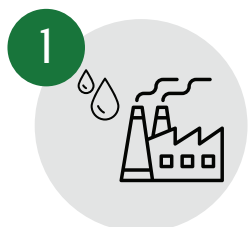


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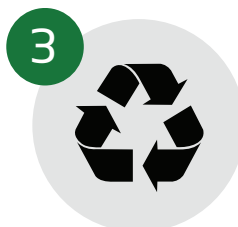
The life cycle of plastic products enhanced with d<sub>2</sub>w biodegradable technology



Only 1% of d<sub>2</sub>w masterbatch is added to regular plastic at the manufacturing stage



Products and packaging made with d<sub>2</sub>w look, feel and perform like regular plastic



They can be recycled if collected - but if they escape into the open environment



Oxygen will help to convert the plastic into biodegradable materials

## Without leaving toxic residues or microplastics behind.

### Stages of biodegradation with d<sub>2</sub>w<sup>®</sup> technology:

1. d<sub>2</sub>w<sup>®</sup> masterbatch is added at the manufacturing stage.
2. Film containing d<sub>2</sub>w<sup>®</sup> 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 should be responsibly disposed of, but may end up in the open environment.
5. The d<sub>2</sub>w<sup>®</sup> then takes effect and the product degrades 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 humus.

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

- 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.

### Helping to protect the environment from persistent plastic litter.

**d<sub>2</sub>w is tested to work in terrestrial and marine environments.**



Straws



Coffee Pods



Bread Bags



@ Symphony Environmental

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Making Plastic Smarter  
**Symphony**  
environmental