## nupik

**iP**lastic

# Welcome to the future in recyclable and biodegradable tumblers

A REVOLUTIONARY SOLUTION TO COMBAT PLASTIC WASTE

#### AN ADVANCED TECHNOLOGICAL PROCESS

Through a combination of nature and biology, polymer science and chemistry, Biotransformation allows our range of products to be fully recycled and 100% biodegradable.

The inbuilt technology applied to our plastics has the benefit of flexible timescales, resulting in a long service life, ranging from six months to three years. This added benefit does not inhibit the usual established recycling processes, therefore ensuring as much plastic as possible remains part of the recyclable circular economy.

### DORMANT APPLICATION

Giving recycling every chance to happen and maintaining full shelf lives during the life of the packaging, our proprietary formulation lies dormant – users wouldn't even know it's there (the way it should be).



#### CHEMICAL TRANSFORMATION

In line with the agreed timing, the formulation gets to work by triggering a catalytic process that actively targets the crystalline regions within polymer chains to radically cleave them apart.





#### **BIOLOGICAL CONSUMPTION**

With a reduction in length of the carbon chains, nature is able to re-engage with the product as it is handed back its ability to decompose within the environment via nature's four agents of decay – light, air, moisture and microbes.

#### NO MICROPLASTIC LEFT BEHIND

Through the process of Biotransformation we can show full biodegradation for a polypropylene container and polyethylene lid – this is how we avoid the creation of microplastics:

- Patented proprietary technology.
- 'Catalytic process' that chemically transforms the polymer chains into biocompatible oligomers.
- Builds on the synergism of all relevant agent of decay (air, moisture, light, heat) to efficiently breakdown the polymer chains.
- Innovative use of prebiotic activators to draw in and stimulate microorganism activities at an early stage.
- Allows time-controlled onset of degradation.
- Bespoke solutions tailored to client's product profile, application and service life.
- No potential harm to the environment across the entire process.



"**iPlastic** polypropylene tumblers are highly recyclable and should be disposed of through a standard recycling system. If for any reason **iPlastic** isn't recycled and thrown away irresponsibly, our technology will allow it to biodegrade into water, CO<sub>2</sub> and biomass, leaving no microplastics or plastic pollution behind."





Nupik UK 6 Cantelupe Mews Cantelupe Road East Grinstead West Sussex RH19 3BG

T: 01342 317688 E: sales@nupik-flo.co.uk www.nupik-flo.co.uk





# nupik



**i**Plastic