

eGreen

Smart Packaging & Tableware.

TWO in ONE Flexy-Glass  
Recyclable & Fully BIODEGRADABLE

## Revolutionary Self-Destruct Plastic Tumblers



# TWOinONE Flexy-Glass

Recyclable & Fully BIODEGRADABLE



The revolutionary TWOinONE Flexy-Glasses enable single use polypropylene to break down into a wax like structure returning the material to nature. So ground breaking and phenomenal is the development that the HRH King Charles III selected the product as part of his Terra Carta brand, which was showcased for the first time at Kelvingrove Gallery in Glasgow, at COP26. King Charles III commented...

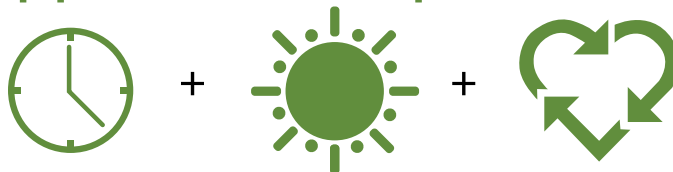
**“brilliant ideas like this come from realising that nature has worked out how to fix most of the problems we face”.**

The tumblers made from this material can either be collected and recycled or

if for some reason they become part of the fugitive plastic waste stream, which is approximately 32% of all plastics, that's about 2 billion tonnes, they will **biodegrade in less than a year, without any micro plastic being present.**

Importantly if fugitive plastic can be reduced on land, it will automatically reduce the amount of plastic that enters rivers and oceans, thereby improving the marine environment. This is what makes it different to other technologies that leave plastic fragments or particles, and therefore are not truly biodegradable. The new material is Reinforced by the British standard BSI PAS 9017 which independently verifies that the plastic biodegrades.

## What happens if the cup is not recycled...



TIME SET

OPEN AIR

BIODEGRADABILITY

- Material is engineered to degrade in a pre-set amount of time.
- Typical conditions on land enable for the process to take effect.

- The plastic fully biodegrades leaving behind no toxins or microplastics.
- This process is called 'BIOTRANSFORMATION'.



# The benefits



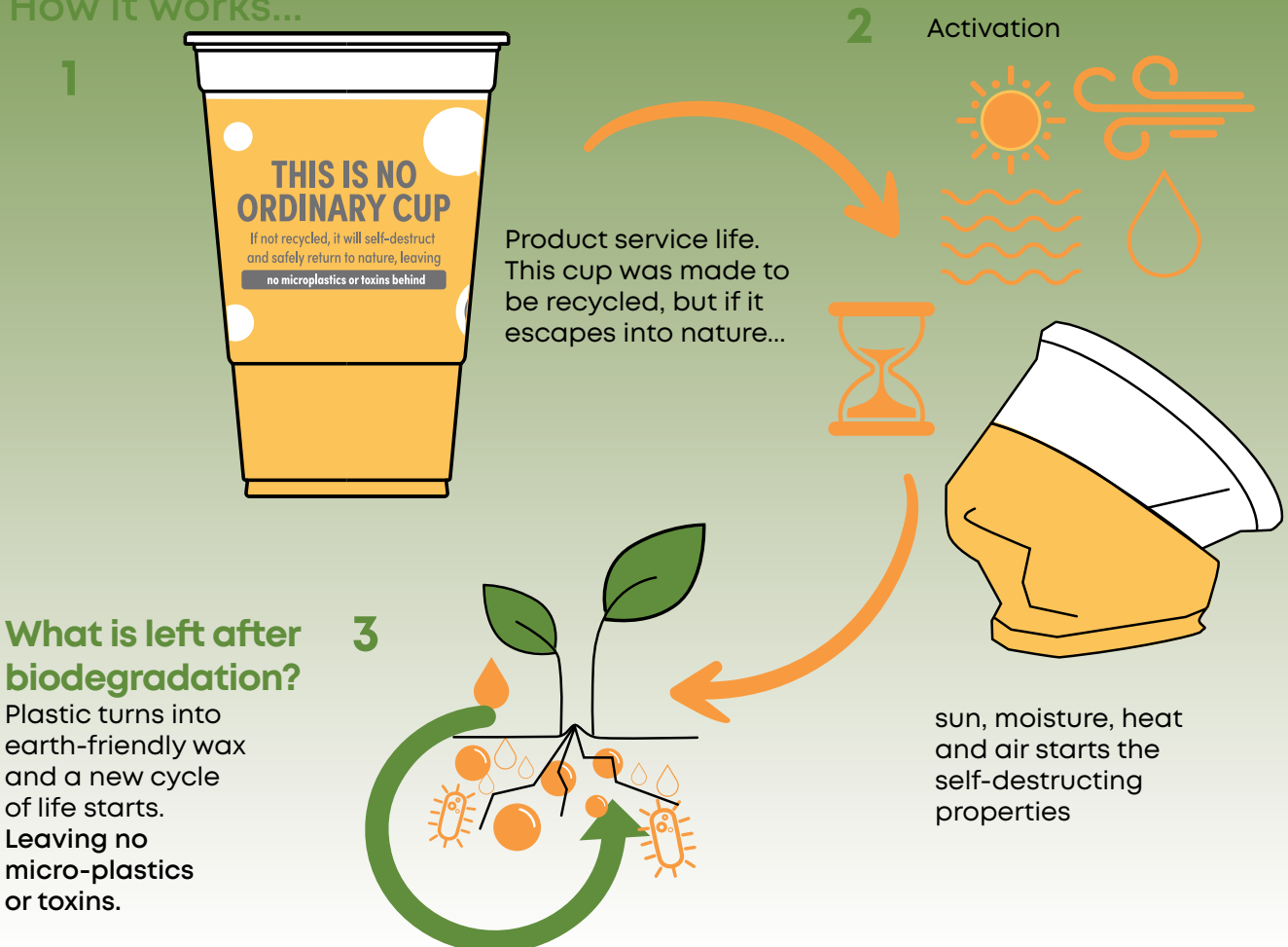
SCAN TO VIEW REPORT

- ✓ **100% Recyclable**  
PRE / RecyClass Compliant
- ✓ **FULLY Biodegradable**  
New BSI Biodegradation standard (PAS 9017)
- ✓ **Made in the UK**  
Low carbon footprint
- ✓ **Breaks down if accidentally disposed of on land in an open environment, without causing effect to land**  
No microplastic or toxins
- ✓ **Fully biodegrade within 1 year of its service life**
- ✓ **Printable**
- ✓ **Ideal solution for any outdoor events or large venues**

## What is Biotransformation®?

It is a new technology that ensures that products and materials that escape the recycling system can safely degrade in the open air environment when exposed to light, air, moisture and microbes. This new technology will allow it to biodegrade into water, CO<sub>2</sub> and biomass, leaving no microplastics or plastic pollution behind.

### How it works...



# The facts

## • Can the tumblers be recycled?

The product is fully compatible with the recycling loop of conventional PP and does not affect the properties and performance of the produced recycled product.

Some of the cups have been recycled into community benches, bracelets and stadium giveaways.

## • What is the expected product's total storage life?

Approx. 2 years under normal storage conditions.

## • Can the product only start to biodegrade once removed from the box?

Yes, but there are many variables. It will start to degrade once outside of the box, if exposed to light, air, moisture and microbes.

## • What is the raw material?

High quality food-grade polypropylene.

## • Is the technology the same as oxo-biodegradable?

Absolutely Not. Unlike Oxo-degradable, Biotransformation builds on the synergetic action of UV, air, heat, moisture and microbes to chemically transform the product into bioavailable oligomeric residue. The process is microplastic-free and does not leave any harmful substances behind.

## • How does this compare to PLA cups?

Unlike PLA, which requires Industrial Composting, no special facilities are required for this product to biodegrade.

Further more our TwinOne Flexy-Glass can be recycled.



# bsi.

## Biodegradation standard (PAS 9017)

### What is this standard?...

In simple terms, the standard measures if products made with IE Polymateria's masterbatch will biodegrade in open air environment without leaving harm in the natural environment (microplastics and toxins). It also specifies that in the process of biodegradation plastic should turn to wax.

For further info: <https://shop.bsigroup.com/products/plastics-biodegradation-of-polyolefins-in-an-open-air-terrestrial-environment-specification>

## Single-use tumblers comparison table

AMBER		GREEN		GREEN +++	
Materials	Positives & Negatives	Materials	Positives & Negatives	Materials	Positives & Negatives
PLA Cups	<ul style="list-style-type: none"> <li>• <b>Industrially Compostable ONLY</b></li> <li>• Very few sites available</li> <li>• <b>Not</b> Recyclable</li> <li>• <b>Mainly</b> made of plastic</li> <li>• Printable</li> </ul>	Polypropylene Flexy-Glass (PP)	<ul style="list-style-type: none"> <li>• Recyclable</li> <li>• Printable</li> <li>• Tree-Free</li> </ul>	TwinOne Flexy-Glass (PP)	<ul style="list-style-type: none"> <li>• Recyclable</li> <li>• <b>FULLY</b> biodegradable in up to 1 year</li> <li>• Printable</li> <li>• Tree-Free</li> </ul>
		Paper Cups	<ul style="list-style-type: none"> <li>• <b>Complex</b> to recycle</li> <li>• <b>Not</b> Tree-Free</li> <li>• Printable</li> </ul>	TruGreen 100% r-PET Cold Cups	<ul style="list-style-type: none"> <li>• 100% recycled Content</li> <li>• Recyclable</li> <li>• Printable</li> <li>• Tree-Free</li> </ul>

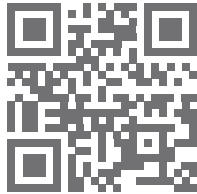
# The range

Why not buy our printed **TWOinONE Flexy-Glass**?  
Let your customers know what they are using,  
a fantastic solution to fugitive plastics.

Ideal for football stadiums, cricket stadiums,  
festivals, horse racing, pop concerts etc.

Contact us to let us know  
your bespoke print requirements:  
**+44 (0) 20 8646 0456 | sales@egreen.co.uk**

Scan below to tackle  
ocean plastic pollution  
and start making  
a difference today



#	Product code	Product	Capacity to brim	Case quantity
<b>Printed TWOinONE Flexy-Glass range</b>				
1	F612ACBIOSELF	Printed TWOinONE Flexy-Glass CE marked ½ pint to brim	284ml	20 pks x 50
2	FG613CBIOSELF	Printed TWOinONE Flexy-Glass CE marked ½ pint to line	340ml	20 pks x 50
3	FG616CBIOSELF	Printed TWOinONE Flexy-Glass CE marked 1 pint to brim	568ml	20 pks x 50
4	FG617CBIOSELF	Printed TWOinONE Flexy-Glass CE marked 1 pint to line	655ml	20 pks x 50
<b>Plain TWOinONE Flexy-Glass Range</b>				
	F612ACBIO*	TWOinONE Flexy-Glass CE marked ½ pint to brim	284ml	20 pks x 50
	FG613CBIO*	TWOinONE Flexy-Glass CE marked ½ pint to line	340ml	20 pks x 50
	FG616CBIO*	TWOinONE Flexy-Glass CE marked 1 pint to brim	568ml	20 pks x 50
	FG617CBIO*	TWOinONE Flexy-Glass CE marked 1 pint to line	655ml	20 pks x 50

\*Made to order, please enquire to learn more.



Made in the UK



Recyclable



Fully Biodegradable



Food Grade



Printable



Microplastic Free



Toxin Free



1. F612ACBIOSELF



2. FG613CBIOSELF



3. FG616CBIOSELF



4. FG617CBIOSELF

Heavy-weight pint options available, details upon request.  
Please Note: TWOinONE Flexy-Glass illustrated are subject to change of styling.



An estimated  
**32%**  
of all plastic doesn't get  
recycled or disposed  
of properly



**THIS IS NO  
ORDINARY CUP**  
If not recycled, it will self-destruct  
and safely return to nature, leaving  
**no microplastics or toxins behind**

**The first plastic that  
actually biodegrades**  
  
- TIMEOUT online

**A 'self-destructing'  
plastic has helped  
define a new  
British Standard for  
biodegradability.**  
  
- National Geographic  
online

**...“as a brilliant idea  
like this come from  
realising that nature  
has worked out how  
to fix most of the  
problems we face.”**  
  
- King Charles III  
The Sun Online

We know that  
**80%**  
of all ocean plastic  
**FLOWS FROM THE LAND**

If we could solve for  
fugitive plastic, we  
could prevent  
**450 million**  
tonnes of plastic from  
reaching our oceans  
by 2040  
  
- EMF,  
Breaking the Plastic Wave, 2020



**STOP  
FUGITIVE  
PLASTIC**