

# Sustainable Polybag Options

Material	Recycled Low-Density Polyethylene (LDPE)	100% Low-Density Polyethylene (LDPE) with D2W Additive	Green PE	Cornstarch	Cellulose	Water soluble bag
What it is:	Recycled LDPE is a material which is sourced from pre-consumer plastic waste.	LDPE with D2W additive to enable the material to break down over time.	Green PE is a plastic produced from sugarcane ethanol, a renewable raw material.	Cornstarch is a biodegradable plastic which is made from natural plant materials.	Cellulose film is manufactured from wood pulp, sourced from certified plantations.	Made with British patented technology Hydropol™
How it's made:	Waste LDPE offcuts from other products are repurposed into new items.	The d2w additive is mixed with the LDPE pellets during production.	The material is bio-based – made from sugar cane waste.	Cornstarch base and modified biopolymers are mixed.	The wood pulp is made into a slurry which is then xanthated to form a viscous liquid. This is cast into a film and regenerated through different wash baths.	Based on PVA technology, hydrolysis takes place to convert into a film
Why it's sustainable:	This waste would otherwise end up in landfill and therefore is a sustainable alternative to standard plastic.	The bag can biodegrade, reducing the plastic waste in the environment or landfill.	The bio-based source makes this product carbon neutral and the raw material remain 100% recyclable.	The material can biodegrade in composting conditions.	Certified for both home and industrial compostability.	Multiple end of life option including immediate dissolution in hot water
Biodegradable / Recyclable	Recyclable only	Biodegradable & recyclable.	Recyclable only	Biodegradable only	Compostable	Biodegradable, compostable, dissolvable
Time to biodegrade:	–	12 – 24 months	–	10 – 18 months	6 to 10 weeks	–
Print / colour limitations:	Has to be clear, can't be full print.	None	None	Best to just have printed logo, we will advise during design.	8-9 colours max. Ziplock not possible.	Best to just have printed logo, we will advise during design.
Composition:	100%, 90%, 50% & 30% Recycled.	99% LDPE, 1% d2w additive	100% LDPE	PBAT, PLA, Corn Starch	Regenerated cellulose film	PVA, HWS Polymer
Thickness options:	0.03mm – 0.15mm	0.03mm – 0.15mm	0.05mm – 0.11mm	0.05mm – 0.11mm	Between 19 and 45 microns	
MOQs:	5,000 pieces	20,000 pieces	50,000 pieces	50,000 pieces	50,000 pieces	50,000 pieces
Lead-time:	2-3 weeks sampling, 6 weeks bulk	2-3 weeks sampling, 6 weeks bulk	2-3 weeks sampling, 6 weeks bulk	2-3 weeks sampling, 6 weeks bulk	3-4 weeks sampling, 6-8 weeks bulk	3-4 weeks sampling, 6-8 weeks bulk
Commodity code:					39207100	