



Food Waste Bag for Anaerobic Digestion

Suitable for plants running all types of anaerobic digestion

Key Benefits

- Suitable for mesophilic and thermophilic systems.
- No de-bagging required;
 - Breaks down fully in the AD system,
 - Contributes to the gas yield,
 - Reduce waste plastic removal costs.
- Reduced maintenance costs, doesn't clog filters or conveyors.
- When fully digested, will not form microplastics in the digestate and will meet the requirements of PAS 110.
- Strength;
 - Excellent strength, puncture resistance and durability,
 - Can hold wet food without disintegrating.
- Clarity
 - Ability to see contents clearly
 - Excellent transparency with over 90% transmission rate when tested to ASTM D1003 verified to ISO 14782

Bag Specifications

The dimensions below are based on a standard Hydropol™ food waste bag but can be used as the specification for any customer sized food waste bag.

Final bag specification to be agreed between customer and manufacturer.

A successful case study has been carried out on bags of the following dimensions:

W 710mm (28") x L 1,000mm (39") x 40µm

The above gauge was found to be effective, but the gauge will need to be development to satisfy the strength and digestion rate requirements for different bag sizes.

Material Used

Hydropol™ 30100 series – fully soluble at $\geq 80^{\circ}\text{C}$ / 176°F

Ordering Requirements

Order must state:

- Bag size
- Packing requirements i.e. number of bags per pack and whether in a roll or flat/ folding requirement etc
- Print requirement (if any; if no print needed state unprinted); can be bespoke, printing plate charges may be incurred.
- Bag format e.g. bottom or side weld.

Print Requirements

(where print is specified)

Considerations for bespoke print

- Ink type- water-based or solvent based
- Ink density/opacity of print
- Percentage ink coverage (suggest <10%)

Packaging Requirements

- Not suitable for vacuum packing
- New, undamaged carton
- Carton to be lined with a standard PE outer and taped/tied with air-tight sealing, PE outer can be recycled
- Label to identify size, thickness (μm) and material (Hydropol 30100 series)

Bag Quality Recommendations

	Standard	UOM	Notes
Width	Tolerance +/- 5%	mm/in	
Gauge	Average Tolerance +/- 10% Spot Tolerance +/- 20%	µm	
Bag Length	Tolerance +/- 2%	mm/in	Measurement from top of bag to base seal (not including skirt)
Print Quality Standards	To be agreed between customer and manufacturer		
Bottom seal	Bottom must be completely sealed		APL SOP 18
Seal(s) must be resistant to cold water	Ability to hold cold water for 2 hours		APL SOP 20