

## TECHNICAL DATA SHEET

Reference DS-412-2025  
Description CompostMemY, Membrane Cover for Compositing Windrows

**Enviroflex CompostMemY** is a high-performance compost cover based on an **expanded polytetrafluoroethylene (ePTFE) microporous membrane**, specifically engineered for **Aerated Static Pile (ASP)** composting systems.

The cover is manufactured as a **three-layer laminate**, consisting of a robust outer protective **polyester fabric** integrated with an **ePTFE functional membrane**. This advanced multilayer construction creates a **semi-permeable, breathable barrier** that effectively reduces **odors and volatile organic compound (VOC) emissions**, while simultaneously allowing **moisture vapor, oxygen, and process air** to pass through the cover. This ensures optimal aerobic conditions within the compost pile without gas accumulation or anaerobic zones.

Enviroflex **CompostMemY** covers are **custom-designed and fabricated** to meet specific project requirements, including **facility layout, pile geometry, feedstock composition, climatic conditions, and process capacity**. This customization ensures reliable performance across a wide range of operational scenarios.

The covers have been **successfully tested and deployed** in composting applications involving **biosolids (sludge), food waste, green waste, poultry waste, and municipal solid waste (MSW)**. Their mechanical strength, chemical resistance, and long service life make them suitable for continuous industrial operation.

Independent **third-party testing** has confirmed **VOC emission reductions exceeding 90%**, contributing to improved environmental compliance, reduced odor nuisance, and better community acceptance of composting facilities.

Parameter	Specification
<b>Product Designation</b>	<b>CompostMemY</b> Microporous Membrane Compost Cover
<b>Material Composition</b>	600D × 600D Oxford polyester fabric with integrated expanded polytetrafluoroethylene (ePTFE) membrane
<b>Nominal Thickness</b>	0.8 – 1.0 mm
<b>Supply Form</b>	Custom-manufactured
<b>Tensile Strength – Base Fabric</b>	Warp: 3400 N
<b>Tensile Strength – Laminate / Functional Layer</b>	Warp: 380 N
<b>Intended Applications</b>	Bio solids (sewage sludge), food waste, green waste, poultry waste, municipal solid waste (MSW)
<b>Areal Weight</b>	480 – 600 g/m <sup>2</sup>
<b>Colour</b>	Black / customizable
<b>Water VA pour Transmission Rate (WVTR)</b>	8000 g/m <sup>2</sup> · 24 h
<b>Hydrostatic Water Resistance</b>	15,000 mm H <sub>2</sub> O / 590 in @ 22 in Hg
<b>Water Absorption</b>	≤ 10%
<b>Construction</b>	Three-layer laminated composite

*All values are typical and may vary depending on production tolerances and application conditions.*

### Functional Properties

- Reduction of odour and volatile organic compound (VOC) emissions
- High resistance to ultraviolet radiation (UV resistance level: UV 5000)
- Watertight and sealed seams suitable for outdoor composting operations

FL-NCMF065



← Polyester  
 ← ePTFE membrane  
 ← polyester

