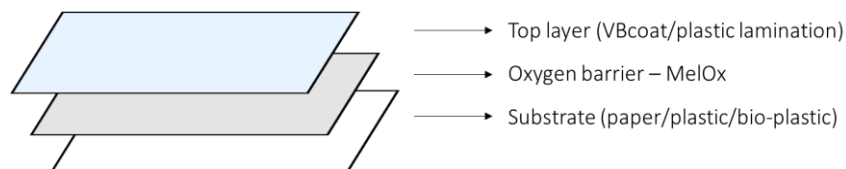


MelOx Data Sheet

Product Description MelOx confers high oxygen barrier performance to eco-friendly packaging products that are based on paper, paperboard, plastics or bio-plastics. This product offers excellent oxygen and oil & grease barrier performance in both typical and tropical conditions.

- How to use**
- Ready for use as is. It is highly recommended not to dilute and not to modify the suspension.
 - Do not heat the suspension to above 40 °C. When drying, follow recommended drying temperature (see User Guide).
 - Mix the suspension well before applying, to assure homogeneity and fluidity. For IBCs, it is recommended to use an IBC mixer.
 - MelOx should be applied on the substrate, and a top layer, such as VBcoat, should be applied on top of it, as illustrated in the figure below.
 - When applying on paper, it is recommended to apply two layers of the barrier formula with a total dry coating weight of $\sim 5 \text{ g/m}^2$. On plastic substrates, one thin layer ($< 2\mu\text{m}$) will suffice.
 - The most suitable coating technologies are rod-coater, gravure, slot-die, and curtain coating.
 - It is not recommended to reuse or store the used material from the machine.

Layer structure for Melodea's barrier solution:



- Storage & shelf life**
- Exhibits good shelf-life stability of at least 6 months in suspension form (in an unopened container, when stored correctly), and at least 1 year as a dry coated layer.
 - Delivered in drums or IBC's.
 - The product should be stored under cool but frost-free conditions (between 5 °C and 25 °C), out of direct sunlight.

MelOx Data Sheet

Properties	Test Method	Value	Units
Grade	----	F61A	----
Product form	----	Water suspension	----
Solid content	----	21 ± 2	Wt %
Deionized water	----	79 ± 2	Wt %
Preservative	----	Included, 100 ppm	----
Antifoam agent	----	Included	----
pH	----	5-7	----
Viscosity	Brookfield, S64, 100 rpm, RT	800 ± 400	cP
Barrier properties for coated paper:			
Oxygen transmission rate (cc/m ² ·day·atm @ 23 °C)	ASTM D3985 and F1927-50	< 0.5	Coated paper, 50% RH
		< 5	Coated paper, 70% RH
Oil & grease barrier	TAPPI T 559 pm-96	12	Coated paper, KIT rating
Barrier properties for coated plastics and bio-plastics:			
Oxygen transmission rate (cc/m ² ·day·atm @ 23 °C)	ASTM D3985 and F1927-50	< 1	Coated BOPP, 50% RH
		< 5	Coated BOPP, 70% RH
		< 1	Coated PE, 50% RH
		< 10	Coated PE, 70% RH
		< 1	Coated Cellulose acetate, 50% RH
		< 10	Coated Cellulose acetate, 70% RH
Recyclability on paper	PTS-RH 021:2012	✓	----