

# MelOx Data Sheet



## Product Description

MelOx confer high oxygen barrier performance to eco-friendly packaging products that are based on paper, paperboard, plastics or bio-plastics.

The product is based on Cellulose Nano Crystals (CNC) – the building block of all living plants, a bio-based, strong, lightweight, and transparent material extracted from cellulose.

Melodea's Oxygen Barrier Coating has excellent oxygen and oil & grease barrier performance in both typical and tropical conditions.

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	----	3-7	
Viscosity	Brookfield, S64, 100 rpm, RT	800 ± 400	cP
Oxygen transmission rate	ASTM D3985 and F1927-50	< 0.5	Coated paper, cc/m <sup>2</sup> ·day·atm @ 23°C, 50% RH
		< 5	Coated paper, cc/m <sup>2</sup> ·day·atm @ 23°C, 70% RH
		< 0.5	Coated BOPP, cc/m <sup>2</sup> ·day·atm @ 23°C, 50% RH
		< 5	Coated BOPP, cc/m <sup>2</sup> ·day·atm @ 23°C, 70% RH
Oil & grease barrier	TAPPI T 559 pm-96	12	Coated paper, KIT rating
Recyclability on paper	PTS-RH:021/97	✓	

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## How to use?

- Ready for use as is.
- It is highly recommended not to dilute or modify it.
- Prior to applying – mix the suspension to assure homogeneity and fluidity.
- If applying on paper – it is recommended to apply two layers of the barrier formula with a total dry coating weight of  $\sim 5 \text{ g/m}^2$ .
- The most suitable coating technologies are Rod-coater, Gravure and Curtain coating machines.

## Storage & shelf Life

- Exhibits good shelf-life stability of at least 6 months.
- Delivered in drums or IBC's.
- Since this is an aqueous dispersion, the product should be stored under cool but frost-free conditions (between  $5^\circ\text{C}$  and  $25^\circ\text{C}$ ) out of direct sunlight.