



Product Description

High Barrier, Water Based, Environmentally Friendly, Nanocomposite Barrier Coating for Transparent Sustainable Packaging

Coating Formulation Properties

Property	Typical Value	Units
Oxygen Permeability	0.2 - 0.6 0.0005 - 0.0015	cc- μ /m ² -day-atm cc-mil/100 in ² -day-atm
Solid Content	6.5 - 7.5	%
pH	6 - 8	
Viscosity	10 - 20	cP (100 rpm, 132 sec ⁻¹)

- Provides source reduction and/or improved sustainability relative to EVOH & PVDC
- More cost effective than EVOH
- Excellent barrier up to 80% RH
- Large enhancements of moisture barrier when coated on flexible packaging films
- Meets compostibility standards on bio-derived films
- Compliant with US and European food contact standards
- Targets dry food applications such as salty snacks, nuts, coffee
- Can be applied at high speeds using standard gravure coating methods
- No halogen, VOC's, or hazardous materials

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Nanolok™ PT ADV-7

Product Data Sheet

Product Description

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Coated Film Properties

Base Film			PET 48 gauge		PET 200 gauge	
Property	Units	RH				
Coating Thickness	micron		0.55 ± 0.1		0.55 ± 0.1	
OTR 23C	cc/m ² -day-atm (cc/100 in ² -day-atm)	0%	0.3	(0.02)	0.4	(0.03)
		50%	0.3	(0.02)	0.3	(0.02)
		65%	0.7	(0.05)	0.8	(0.06)
		80%	6	(0.4)	5	(0.3)
MVTR 38C	gm/m ² -day (gm/100 in ² -day)	55%*	0.5*	(0.03)*	0.2*	(0.015)*
		85%	12	(0.8)	4.5	(0.3)
Adhesion	gm/inch	23C	>300		>300	

* 55% RH MVTR data taken at 23C – i.e. air conditioned environment

Comparison of Coated and Uncoated Film

Film	Nanolok PT ADV-7 coating thickness (microns)	OTR 23C 50% RH (cc/m ² -day-atm)	MVTR 38C, 85% RH (gm/m ² -day-atm)
PET 48 gauge	None	120	40
	0.55	0.4	12
PET 200 gauge	None	30	9
	0.4	0.3	4.5
BOPP 80 gauge	None	2150	7
	0.6	0.9	2
PLA 80 gauge	None	1000	270
	0.5	0.7	54

Available for evaluation:

48 gauge PET coated with 0.55 μ Nanolok PT ADV-7 in 5000 ft, 36" wide rolls.