Nanolok™ WR 301409

Product Data Sheet

Product Description

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

Coating Formulation Properties

Property	Typical Value	Units
Oxygen Permeability	0.4 – 0.8 0.001 - 0.002	cc-µ/m^2-day-atm cc-mil/100 in^2-day-atm
Solid Content	13.0 – 15.0	%
pH	6 - 8	
Viscosity	30 - 50	cP (60 rpm, 79.2 sec^{-1})

- Provides source reduction and/or improved sustainability relative to EVOH & PVDC
- More cost effective than EVOH
- Excellent barrier up to 80% RH
- 2x the solid content of InMat's other products reducing the required drying time resulting in a higher speed coating process
- Excellent adhesion on all substrates eliminating the need for a primer
- 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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Coated Film Properties

Base Film			**PET 48 gauge**	
Property	Units	RH		
Coating Thickness	micron		**1.0 ± 0.1**	
OTR 23C	cc/m^2-day-atm (cc/100 in^2-day-atm)	0%	**0.4**	**(0.03)**
		50%	**0.6**	**(0.04)**
		65%	**0.6**	**(0.04)**
		80%	**14**	**(0.9)**
MVTR 38C	0.8 um coating gm/m^2-day (gm/100 in^2-day)	85%	**15**	**(0.9)**
Adhesion	gm/inch	23C	**>300**	

Comparison of Coated and Uncoated Film

Film	**Nanolok WR 301409 coating thickness (microns)**	**MVTR 38C, 85% RH (gm/m^2-day-atm)**
PET 48 gauge	None	45
	0.8	**15**
BOPP 80 gauge	None	8
	1.1	3.5
PLA 80 gauge	None	275
	1.1	60