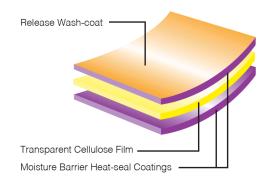




NATUREFLEX™ NKR-F

FEATURES - TRANSPARENT HIGH BARRIER HEAT-SEALABLE FILM WITH RELEASE COAT

- Based on renewable resources
- Certified as compostable in both industrial and home composting environments, also suitable for anaerobic digestion
- Excellent moisture barrier
- Heat-sealable
- Formulated for enhanced print and conversion receptivity
- Excellent transparency and gloss
- Excellent dead-fold characteristics
- Inherent anti-static properties
- Controlled slip characteristics
- Excellent barrier to gases and aromas
- Resistant to oils and greases
- Recommended as outer web in lamination



APPLICATIONS

The incorporation of a minimal amount of PVdC to optimize moisture and gas barrier functionality allows for simpler and lighter packaging to extend and maintain shelf life of the packaged products. One surface has an additional wash-coat to enhance jaw release properties. Target applications include twist-wrap, VFFS, overwrap, flow-wrap and lamination for moisture sensitive products.

NKR-F can be used in both standard adhesive and extrusion lamination technologies.

TECHNICAL PROPERTIES (TYPICAL VALUES)

PROPERTY		TECT DACIC	TEST CONDITIONS	UNITS		NKR-F		
		TEST BASIS	TEST CONDITIONS			75	90	120
THICKNESS		Transcendia test	-	mil		0.75	0.92	1.18
YIELD		Transcendia test	-	in²/lb		25500	21000	16400
PERMEABILITY TO:	WATER VAPOR	ASTM E96	100°F 90% RH	g/100in ² .24 hrs		1.25		
	OXYGEN	ASTM F 1927	73°F 0% RH	cc/100in ² .24		0.06		
			73°F 50% RH	hrs		0.32		
OPTICAL:	GLOSS	ASTM D 2457	45°	units		105		
	HAZE (WIDE ANGLE)	ASTM D 1003	2.5°	%		5		
COEFFICIENT OF FRICTION (FILM TO FILM)		ASTM D 1894	Static			0.35		
			Dynamic	-		0.30		
TENSILE STRENGTH		ASTM D 882	-	kpsi	MD	18		
					TD	8.5		
ELONGATION AT BREAK		ASTM D 882	-	%	MD	18		
					TD	70		
ELASTICITY MODULUS		ASTM D 882	-	kpsi -	MD	≥435		
(1% SECANT)					TD	≥220		
SEALING RANGE		Transcendia test	0.5 secs; 10 psi	°F			240-340	
SEAL STRENGTH		Transcendia test	275°F; 0.5 secs; 10 psi	g(f)/in			250*	

All information, recommendations and suggestions contained herein, including, without limitations, stated values (collectively the "Information") shall be used only as a guide by Purchaser and not for specification or any other purpose. The Information does not constitute a warranty nor guaranty of any type whatsoever. Purchaser should independently determine the suitability of all material purchased and must confirm adaptability and other characteristics by conducting its own test. Transcendia shall have no liability as a result of any loss, expense, damage, cost or other injury which results from Purchaser's reliance on the Information.





ENVIRONMENTAL DATA

MEASURE	TYPICAL VALUE/ SUITABILITY FOR USE	VALIDATION OR TEST METHOD				
Biobased carbon content (14C)	88%	ASTM D6866				
Biomass content (total)	86%	Transcendia calculation				
Carbon footprint (GHG) kgCO ₂ eq/kg (incl.biogenic)	5.05	Peer reviewed LCA 2010 GaBi software				
Industrial compostability	Certified	EN13432, EN14995, ASTM D6400 and ISO 17088				
Home compostability	Certified	OK compost home				
Anaerobic digestion	Approved	ISO 15985				
Marine biodegradation	Approved	ASTM D6691-09				

NatureFlex™ NKR-F films are suitable for a range of Organic Recycling methods, as detailed above, and for incineration with energy recovery. However they are not designed for thermal (melt) recycling methods. Please check for availability of FSC™ Certified Film.

FOOD CONTACT

NatureFlex™ NKR-F is formulated to comply with US legislation for many room temperature food contact applications. Customers intending to use the film in a food contact application must request the Declaration of Compliance which gives full details. For information on other countries please contact your Transcendia Sales Office.

PEFC PRECIS-33-1630 Promoting Sustainable Forest Management www.pefc.co.uk



The mark of responsible forestry









HEALTH AND SAFETY GUIDELINES

For Health and Safety information, please refer to literature reference N190.

FILM STORAGE

To maintain the high quality of this product during storage it is recommended that NatureFlex™ NKR-F should be stored in its original wrapping away from any source of local heating or direct sunlight.

Recommended conditions of storage are:

Temperature: 60-75°F Relative Humidity: 35-55%

NatureFlex™ NKR-F is suitable for use for 6 months from the date of delivery and stocks should be used in rotation. Film should be allowed to reach operating room temperatures for 24 hours before use.

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