

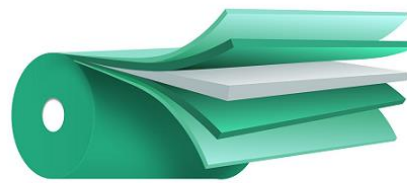


PNRA21S is 5 layer transparent BOPE film, LLDPE based. One side corona treated, suitable for flexo printing, other side heat sealable.

Film density (0.921 g/cm³)



PEONEER
Innovative eco-friendly film



- PE printable layer, treated
- PE Intermediate layer
- PE core layer
- PE Intermediate layer
- PE heat sealable layer

TYPICAL APPLICATIONS

Suitable for flexo printing : roto printing available using up to date roto machines

Lamination solventless recommended

Single web as substitute of thicker blown PE film – recommended for two layers pillow bags VFFS applications in conjunction with a low sealing blown film to enhance mechanical properties like puncture , Elmendorf and tear resistance

To achieve barrier properties is recommended to be laminated to a PE/Evoh/PE low sealing structure

Properties	Test Methods	Deviation	Typical Values				
Thickness, μm			20	25	30	35	40
Average thickness deviation, %		\pm	3	3	2.5	2.5	2.5
Yield, m ² /kg		$\pm 5\%$	54.3	43.5	36.2	31.1	27.2
Unit weight, g/m ²		$\pm 5\%$	18.4	23	27.6	32.2	36.8
Gloss (45°)	ASTM D 2457	\geq	88				
Haze, %	ASTM D 1003	± 1	2.8	3	3.1	3.2	3.5
Coefficient of Friction *	ASTM D 1894	± 0.05	0.3				
Elmendorf Test MD, mN Tear Test TD, mN	ASTM D 1938	$\pm 10\%$	< 500 < 500				
Tensile strength, MPa							
MD	ASTM D 882	± 20	75				
TD			175				
Elongation at break, %							
MD	ASTM D 882	± 30	320				
TD			70				
Shrinkage, %							
100°C – 5 min	Internal Method	± 1	3				
			5				
Seal strength, N/15 mm, 100°C, 1bar 1 sec **	Internal Method	\geq	5	6	7	7	7
Sealing Initiation Temperature (SIT), °C **	Internal Method		92				
Surface treatment, dynes/cm	ASTM D 2578a		Min 38	Min 38	Min 38	Min 38	Min 38

*- Dynamic COF film/film, non-treated to non-treated side

**-Reported heat sealing properties on non-treated to non-treated film side

The specified values are based on average results, measured by the manufacturer during standard production. They should not be considered as Data Sheet of any particular product.

The end user should be satisfied as to the suitability of the product for the intended application and the present regulatory regime. Therefore Plastchim-T AD disclaims any liability for damages arising from the non-suitability of the product for the effected application.



FOOD CONTACT

The BOPE Film complies with all national and international standards and requirements for food contact. Declaration of Compliance is accessible at www.plastchim-t.com.

INDICATION OF PRINTABLE SURFACE

PNRA21S is usually supplied with printable layer on the outside surface, in case of requirement for printable layer inside, this must be agreed with our sales representative before order processing.

PACKING

	Core Diameter	Outer Diameter *	Notes
Vertical	152 mm (6`) 76 mm (3`)	≤ 550 mm	≤ 700 mm – two or more rows > 700 mm – one row
Horizontal	152 mm (6`) 76 mm (3`)	≤ 770 mm	

(*): In case of no other requirements

TOLERANCES

Weight tolerance, depending on the order volume	Width tolerance	Length tolerance
≤ 1 000 kg ± 20%	± 2 mm	±5 %
1001 ÷ 10 000 ± 10%		
>10 000 ± 5%		

Storage and Transportation Terms & Conditions

Palletizing of goods is done according to customer's requirements.

The storage of all goods is in dry, covered and clean warehouses.

The transportation of the goods is carried out in dry, covered and clean means of transport.

The recommended temperature of storage/transportation is 10-30°C. If the temperature is not within the recommended limits, the following issues may occur:

- Decrease of dyne level
- Higher haze of the film
- Poor adhesion of the film surface that on a later stage could be an issue for laminating and printing
- Extremely low COF that can trouble further processing

Excessive humidity can be a reason for film blocking.

It is recommended that BOPE film should be tempered at operating room temperature for 24 hours before use.

Adherence to the above mentioned storage conditions ensures that the film is suitable to be used up to 6 months after production.

Claims regarding to the transportation are accepted within 1 week after the delivery date. If any, a record has to be taken in the CMR.

Last update: Edition 1 / 15th December 2022