

# NHS(M)

## Non-Heat Sealable Metallizable Base Film



**DESCRIPTION :**

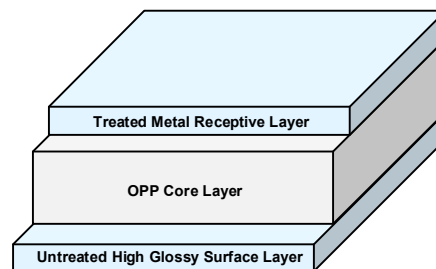
**Gulf Pack NHS(M)** is a coextruded, bi-axially oriented polypropylene film with high glossy surface on one side and other side treated especially design with metal receptive layer for good aluminum metal adhesion.

**PRODUCT FEATURES :**

Good optical and mechanical properties.  
 Excellent machinability.  
 Excellent lay flat characteristics.  
 Good dimensional stability.  
 Good resistance to oils, fats & chemicals.  
 Good barrier to moisture, odor & gases.

**APPLICATIONS :**

Prime substrates for metallization of film.  
 For printing and decorative packaging.



PROPERTIES		UNIT	TYPICAL VALUES				TEST METHOD.
PHYSICAL	Thickness	Microns	15	20	30	35	ASTM D 374
		Gauge	60	80	120	140	
	Grammage	g/m <sup>2</sup>	13.65	18.20	27.30	31.85	*GPIM
		lbs/ream	8.4	11.2	16.8	19.6	
	Yield	m <sup>2</sup> /kg	73.26	54.95	36.63	31.40	
		in <sup>2</sup> /lb	51,600	38,700	25,800	22,100	
Coefficient of Friction (Film/Film)			0.40				ASTM D 1894
Surface Tension (Treated Side)		dynes/cm	44				ASTM D 2578
OPTICAL	Haze	%	2.0				ASTM D 1003
	Gloss (45°)		92				ASTM D 2457
MECHANICAL	Tensile Strength at Break	*MD	15				ASTM D 882
		*TD	27				
		MD	21,330				
		TD	38,394				
	Elongation at Break	MD	170				ASTM D 882
		TD	50				
	Modulus of Elasticity	MD	210				ASTM D 882
		TD	390				
MD		298,620					
TD		554,580					
THERMAL	Thermal Shrinkage	MD	< 4.0				GPIM (120°C (248°F), 5 min, air)
		TD	< 2.0				
BARRIER	Water Vapor Permeability (W.V.T.R.)	g/m <sup>2</sup> /24h	7.5	7.5	7.0	7.0	ASTM F 1249 (38°C / 90% RH)
		g/100in <sup>2</sup> /24h	0.48	0.48	0.45	0.45	

\* GPIM – Gulf Pack Internal Method

\*MD – Machine Direction

\*TD – Transversal Direction

**Gulf Pack NHS(M)** films comply with the EU Regulation 10/2011/CE and USA FDA Code of federal regulations CFR21 section 177.1520 (c) 1.1 and is suitable for use in packaging, transporting or holding foods.

The information contained in this technical leaflet is to the best of our knowledge & experience. Since the conditions under which our products maybe used are beyond our control, recommendations are made without warranty or guarantee.

Bi-axially oriented polypropylene film aged with time and will exhibit deterioration of properties if it is not stored in a dry environment at a temperature 30°C or below. We highly recommend our customer to use recommended storage condition and consume product before 6 months from date of production in our plant.

Detail advice regarding other specific application of **Gulf Pack NHS(M)** and other films in the Gulf Pack range is available upon request.

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