

# HS(M)

## Heat Sealable Metallizable Base Film



**DESCRIPTION :**

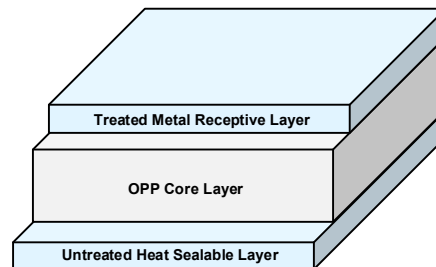
**Gulf Pack HS (M)** is a bi-axially oriented, polypropylene film with both sides heat sealable, especially design with metal receptive layer on one side.

**PRODUCT FEATURES :**

Metal receptive layer for good aluminum metal adhesion.  
 Good optical and mechanical properties.  
 Excellent machinability.  
 Excellent lay flat characteristics.  
 Good resistance to oils, fats & chemicals.  
 Good barrier to moisture, odor & gases.

**APPLICATIONS :**

Prime substrates for film metallization.  
 Printing and lamination.  
 Top layer for laminated pasta packaging film.



PROPERTIES		UNIT	TYPICAL VALUES				TEST METHOD.
PHYSICAL	Thickness	Microns	18	20	25	30	ASTM D 374
		Gauge	72	80	100	120	
	Grammage	g/m <sup>2</sup>	16.38	18.20	22.75	27.30	*GPIM
		lbs/ream	10.1	11.2	14.0	16.8	
	Yield	m <sup>2</sup> /kg	61.05	54.95	43.96	36.63	
		in <sup>2</sup> /lb	43,000	38,700	31,000	25,800	
Coefficient of Friction (Film/Film)			0.40				ASTM D 1894
Surface Tension (Treated Side)		dynes/cm	44				ASTM D 2578
OPTICAL	Haze	%	3.0				ASTM D 1003
	Gloss (45°)		85				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				
THERMAL	Thermal Shrinkage	MD	< 4.0				GPIM (120°C (248°F), 5 min, air)
		TD	< 2.0				
	Heat Seal Range	°C (°F)	105 – 140 (221 – 284)				GPIM
	Heat Seal Strength (Film/Film)	g/15mm	275				GPIM (130°C, 1bar, 1sec)
lb/0.59in		0.60				GPIM (266°F, 14.5psi, 1 sec)	

\* GPIM – Gulf Pack Internal Method

\*MD – Machine Direction

\*TD – Transversal Direction

**Gulf Pack HS(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 HS(M)** and other films in the Gulf Pack range is available upon request.

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