

# HF509

## Metallized White Voided Film



WHITE VOIDED METALLIZED FILM

**DESCRIPTION :**

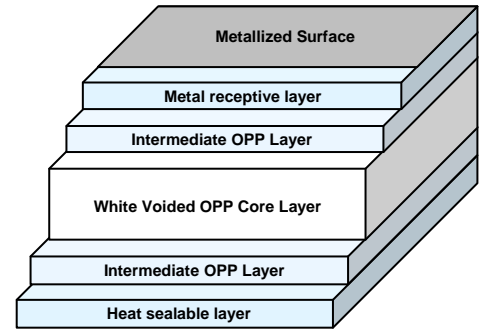
**Gulf Pack HF509** is a metallized white voided film, one side heat sealable layer.

**PRODUCT FEATURES :**

High yield due to lower density  
 High gloss surface.  
 White appearance on non metallized side.  
 Excellent hot melt anchorage.

**APPLICATIONS:**

Rotogravure and flexographic printing.  
 Single web structure.  
 Lamination.  
 Suitable for cold seal.



PROPERTIES		UNIT	TYPICAL VALUES			TEST METHOD.
PHYSICAL	Thickness	Microns	30	38	47	ASTM D 374
		Gauge	120	152	188	
	Grammage	g/m <sup>2</sup>	18.60	23.60	29.14	*GPIM
		lbs/ream	11.54	14.5	17.9	
	Yield	m <sup>2</sup> /kg	53.77	42.40	34.31	
		in <sup>2</sup> /lb	37,900	29,900	24,172	
	Density	g/cc	0.62			
Coefficient of Friction (Film/Film)		0.35			ASTM D 1894	
Surface Tension (Treated Side)	dynes/cm	38			ASTM D 2578	
OPTICAL	Optical density	%	3.0			GPIM
MECHANICAL	Tensile Strength at Break	*MD	8			ASTM D 882
		*TD	16			
		MD	11,376			
		TD	22,752			
	Elongation at Break	MD	135			ASTM D 882
TD		40				
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	200			GPIM (130°C, 1bar, 1sec)
lb/0.59in		0.74			GPIM (266°F, 14.5psi, 1 sec)	
BARRIER	Water Vapor Permeability (W.V.T.R.)	g/m <sup>2</sup> /24h	0.30			ASTM F 1249 (38°C / 90% RH)
		g/100in <sup>2</sup> /24h	0.019			
	Oxygen Transmission Rate (O.T.R.)	cc/m <sup>2</sup> /24h	50			ASTM D 3985 (23°C / 0% RH)
		cc/in <sup>2</sup> /24h	3.22			

\* GPIM – Gulf Pack Internal Method

\*MD – Machine Direction

\*TD – Transverse Direction

**Gulf Pack HF509** films comply with EU Regulation 10/2011/EC and USA FDA Code of Federal Regulations CFR21 section 177.1520 (c) 1.1 and are suitable for use in packaging, carrying and transporting foodstuffs.

The information contained in this technical leaflet illustrates typical values only and are to the best of our knowledge. Since the conditions under which our films may be used are beyond our control, such values are declared without warranty or guarantee.

Bi-axially oriented polypropylene films age with time and will exhibit deterioration of some properties if not stored in a suitable environment at a temperature 30°C or below. We strongly advise our customers to use recommended storage conditions and consume products before 3 months from date of production in our plant.

**Gulf Pack HF509** standard surface treatment location is on the outer side (O); other treatment preference can be arranged upon agreement with the sales representative before order processing.

Detailed advice regarding other specific applications of **Gulf Pack HF509** and other films in the Gulf Pack range is available upon request.