# **HF400**

### Solid White Heat Sealable Film



Last update: 01-Oct-2014

#### **DESCRIPTION:**

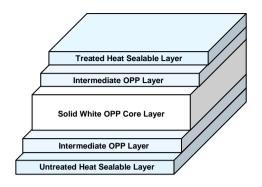
**Gulf Pack HF400** is a solid white opaque film, both sides heat sealable, treated to suit printing, coating and lamination purposes. Excellent whiteness and opacity for various food packaging applications.

## **PRODUCT FEATURES:**

Solid white finish an ideal background for multi-color printing design
Good heat-sealing with hot tack properties
Good opacity imparts better barrier to light
Good resistance to oils, fats & chemicals

#### APPLICATIONS:

Printing and lamination
Packaging for bakeries, confectioneries, etc.
Pouching and overwrap



PROPERTIES			UNIT	TYPICAL VALUES				TEST METHOD.
PHYSICAL	Thickness		Microns	20	30	35	40	ASTM D 374
			Gauge	80	120	140	160	
	Grammage		g/m²	19.20	28.80	33.60	38.40	*GPIM
			lbs/ream	11.8	17.7	20.6	23.6	
	Yield		m²/kg	52.08	34.72	29.76	26.04	
			in²/lb	36,700	24,500	21,000	18,300	
	Coefficient of Friction (Film/Film)			0.40	0.40	0.40	0.40	ASTM D 1894
	Surface Tension (Treated Side)		dynes/cm	38	38	38	38	ASTM D 2578
OPTICAL	Opacity		%	63	65	68	70	ASTM D589-97
	Gloss (45°)			50				ASTM D 2457
MECHANICAL	Tensile Strength at Break	*MD		13				ASTM D 882
		*TD	kg/mm²	26				
		MD	psi	18,486				
		TD	μδι	36,972				
	Elongation at Break	MD	%	165				— ASTM D 882
	Liongation at break	TD	70	50				
THERMAL	Thermal Shrinkage	MD	%	< 4.0				GPIM (120°C (248°F), 5 min, air)
		TD	/0	< 2.0				
	Heat Seal Range		°C (°F)	105 – 140 (221 – 284)				GPIM
	Heat Seal Strength (Film/Film)		g/15mm	200	300	300	300	GPIM (130°C, 1bar, 1sec)
			lb/0.59in	0.44	0.66	0.66	0.66	GPIM (266°F, 14.5psi, 1 sec)

<sup>\*</sup> GPIM – Gulf Pack Internal Method

**Gulf Pack HF400** 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 6 months from date of production in our plant.

**Gulf Pack HF400** 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 HF400 and other films in the Gulf Pack range is available upon request.

<sup>\*</sup>MD – Machine Direction

<sup>\*</sup>TD – Transverse Direction