# **HF122**

## **Anti-fog Film**



Last update: 01-Oct-2014

#### **DESCRIPTION:**

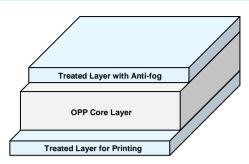
**Gulf Pack HF122** is a transparent heat sealable film, both sides treated, one side with anti-fog functionality.

## **PRODUCT FEATURES:**

Excellent anti-fog properties
Good optical properties
High seal strength and good hot tack
Good transparency to display packed
fresh foods

# APPLICATIONS:

Widely used in packaging of fresh fruits, meat, vegetables, bread, etc. Rotogravure and flexographic printing HFFS and VFFS packaging



	PROPERTIES	UNIT	TYPICAL VALUES					TEST METHOD.
PHYSICAL	Thislman	Microns	20	25	30	35	40	ASTM D 374
	Thickness	Gauge	80	100	120	140	160	
	C	g/m²	18.20	22.75	27.30	31.85	36.4	*GPIM
	Grammage	lbs/ream	11.2	14.0	16.8	19.6	22.44	
	Yield	m²/kg	54.95	43.96	36.63	31.40	27.47	
	rieid	in²/lb	38,700	31,000	25,800	22,100	19,390	
	Coefficient of Friction (Film/File	n)	0.25					ASTM D 1894
	Surface Tension (Treated Side)	dynes/cm	38					ASTM D 2578
OPTICAL	Haze	%	2.5					ASTM D 1003
	Gloss (45°)		85					ASTM D 2457
MECHANICAL	Tensile Strength at Break -	D kg/mm <sup>2</sup>	15					ASTM D 882
		D Kg/IIIII <sup>2</sup>	28					
		D noi	21,330					
		D psi	39,816					
	Elongation at Break	D %	170					ASTM D 882
	T Elongation at break	D	50					
THERMAL	Thermal Shrinkage	) %	< 4.0					GPIM (120°C (248°F), 5 min, air)
		D /*	< 2.0					
	Heat Seal Range	°C (°F)	120 – 140 <i>(248 – 284)</i>				GPIM	
	Lloot Cool Ctropoth (cu. cu.	g/15mm	275					GPIM (130°C, 1bar, 1sec)
	Heat Seal Strength (Film/Film	lb/0.59in	0.60					GPIM (266°F, 14.5psi, 1 sec)
BARRIER	Water Vapor Permeability	g/m²/24h	7.1	6.2	5.3	4.4	3.8	ASTM F 1249 (38°C / 90% RH)
	(W.V.T.R.)	g/100in²/24h	0.46	0.40	0.34	0.28	0.25	
	Oxygen Transmission Rate	cc/m <sup>2</sup> /24h	2500	2000	1600	1400	1200	ASTM D 3985 (23°C / 0% RH)
	(O.T.R.)	cc/in²/24h	160	130	100	90	80	

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

Gulf Pack HF122 films comply with the EU Regulation 10/2011/EC 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 HF122** standard surface treatment location is on both sides (**B**); other treatment preference can be arranged upon agreement with the sales representative before order processing.

Detailed advice regarding other specific applications of **Gulf Pack HF122** and other films in the Gulf Pack range is available upon request.

<sup>\*</sup>MD – Machine Direction

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