

# HF103

## One Side Heat Sealable (Asymmetric Film)



TRANSPARENT BOPP FILM

**DESCRIPTION :**

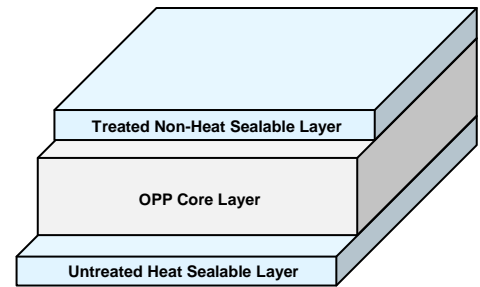
**Gulf Pack HF103** is an asymmetric film with one side heat sealable, other side non-heat sealable, specially designed with high slip and low antistatic properties.

**PRODUCT FEATURES :**

- High slip and low antistatic property
- Superior machinability
- Good heat seal strength
- Good optical and mechanical properties
- Good resistance to most oils & fats

**APPLICATIONS :**

- Printing & lamination on a wide range of substrates
- High speed automatic packaging (HFFS & VFFS)



PROPERTIES		UNIT	TYPICAL VALUES		TEST METHOD.
PHYSICAL	Thickness	Microns	17	20	ASTM D 374
		Gauge	68	80	
	Grammage	g/m <sup>2</sup>	15.47	18.20	*GPIM
		lbs/ream	9.5	11.2	
	Yield	m <sup>2</sup> /kg	64.64	54.94	
		in <sup>2</sup> /lb	45,500	38,700	
Coefficient of Friction (Film/Film)			0.25		ASTM D 1894
Surface Tension (Treated Side)		dynes/cm	42		ASTM D 2578
OPTICAL	Haze	%	2.5		ASTM D 1003
	Gloss (45°)		90		ASTM D 2457
MECHANICAL	Tensile Strength at Break	*MD	15		ASTM D 882
		*TD	28		
		MD	21,330		
		TD	39,816		
	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

\* GPIM – Gulf Pack Internal Method      \*MD – Machine Direction      \*TD – Transverse Direction

**Gulf Pack HF103** 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 HF103** 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 HF103** and other films in the Gulf Pack range is available upon request.