



TECHNICAL DATA SHEET

UM-53B is MDOPE with barrier coated film is the stretched film which the main material is polyethylene and through barrier coating process. Protects packaged food from oxygen and water and thus enables recycling-friendly mono-material packaging.

FEATURE	1) UM-53B is stiffness, high transparency MDO PE film and heat resistance at 130 °C 2) To replace PP,PET or PA materials for making reclyable packaging purposes. 3) Good barrier property (OTR & WVTR) 4) Recycling-friendly mono-material packaging.
---------	---

USE	FULL PE Packaging.
-----	--------------------

General Physical properties

Description		Unit	Specification	Test Method
Width		mm	Order +5,-0	UPI Method
Length		m	Order 0,+3%	
Thickness		um	23±7%	
Tensile Strength	MD	MPa	≥60	ASTM D 882 /JIS K 7127
	TD		≥15	
Elongation at Break	MD	%	≥50	
	TD		≤150	
Water Vapor Transmission Rate		g/m ² .day	<10	ASTM F-1249 (90.0%RH and 38.0 °C)
Oxygen Transmission Rate		cc/m ² .day	<10	ASTM D3985 (0%RH and 23 °C)
Kinetic COF : Inside the roll		-	0.2-0.6	ASTM D 1894/JIS K 7125
Haze		%	≤30	ASTM D 1003
Surface Tension :	inside and outside	Dynes	≥38	
Color of Film		-	Clear	
Gel	Number	pcs./m ²	10	
	Size Ø	mm	0.5-1.0	UPI Method
Black spot	Number	pcs./m ²	5	
	Size Ø	mm	0.1-0.5	

Note : The barrier coated side is inside the roll.

Raw Material : Polyethylene film coated with barrier coating.

Statutory and regulatory : Complies with U.S. FDA : 21 CFR part 177.1520

Updated Date : 13/5/2026

Effective date : 08/07/2024

Page 1/2

FM-RND-027 Rev.00

TECHNICAL DATA SHEET

Appearance :	The film shall be uniform ; free of pin hole , foreign matter and streaks.
Storage :	Store in dry place, high temperature not over 40 °C, keep away from direct sunlight, high moisture and fuel gas from LPG gas.
Product guarantee :	The physical properties is not over a year. The change in color of film The change in color of film or appearance is not over six months. The corona treatment and COF property is not over three months from the date of manufacture.

Roll Characteristics.

Width tolerance	:	(+5, -0)mm.(measure on film)
Internal Core diameter	:	76 (+3 , -0) mm.
Joint	:	1 for 20% maximum of total delivery.
Number of joint	:	Maximum 1 joint/roll with red tape.
Film Appearance	:	The film shall be uniform ; free of pin hole , foreign matter and streaks. No creasing , no swollen roll. No corrugation , no blocking. Misalignment is not over 2 mm.

Packaging.

☐

A

☐

B

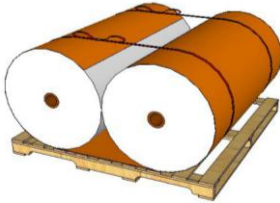
☐

C

☐

D

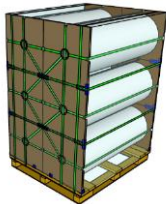
A . Horizontal for laminate film



B. Vertical for laminate film



C. Hanging horizontal for shipping and airfreight



D. Horizontal for Heavy duty sack



Roll Identification:

Each roll is identified with label sticked on the roll.

There is information including customer name , width , length , thickness , weight , corona treatment , etc.

The production history can monitor on batch number 15 digits described below;

AA	BB	CC	DDDDDD	- EEE
↓	↓	↓	↓	↓
Type of sale order	Production year	Production month	Number of sale order	Roll Number

Approved by (Customer) :

Position :

Company :

Date :

Effective date : 08/07/2024

Page 2/2
FM-RND-027 Rev.00