



# LIMEX Pellet BLF

LIMEX Pellet BLF masterbatch has been designed by optimally combining ingredients for blown film extrusion molding, including alternatives for plastic shopping bags.

LIMEX Shopping bags and Bio LIMEX Shopping bags can be manufactured by adding and diluting HDPE or LLDPE based on this masterbatch.

## Packaging & Delivery

- Minimum packing unit: 25 kg in aluminum bag
- Please contact for any special packaging or overseas shipping.

## Masterbatch Physical Properties

	Unit	Measurement Method	PE78-02M LHPE-7802M	PE78-02BM
MFR	g/10min	JIS K 7210	0.6	0.6
Ash	%	ISO 3451-1	78	78
Specific Gravity	g/cm <sup>3</sup>	ISO 1183	1.9	1.9
Water Content	%	Drying Loss	≦ 0.06	≦ 0.06

※ Above is representative value, NOT guaranteed value

## Recommended Recipe

	PE78-02M LHPE-7802M	PE78-02BM	HDPE	LLDPE	Bio HDPE	Bio LLDPE	Total
HD LIMEX Bag	70		27 ※ <sup>1</sup>	3 ※ <sup>2</sup>			100
LLD LIMEX Bag	70			30 ※ <sup>3</sup>			100
Bio HD LIMEX Bag		70		3 ※ <sup>2</sup>	27 ※ <sup>1</sup>		100
Bio LLD LIMEX Bag		70				30 ※ <sup>3</sup>	100

※<sup>1</sup> MFR = 0.05 g/10min HDPE is recommended.

※<sup>2</sup> MFR = 1~4 g/10min, melting point = 120~130°C metallocene-polymer LLDPE is recommended.

※<sup>3</sup> MFR = 1~4 g/10min, melting point = 120~130°C LLDPE is recommended.

※<sup>4</sup> Dry-blend grades are available.

## Heat Seal Requirements

	Upper	Lower ( Silicon )	No. of Shots
LIMEX Shopping Bag ( 20~30μm ) ※ <sup>1</sup>	230°C	90°C	180
LIMEX Shopping Bag ( 40μm~ )	180°C	—	35

※<sup>1</sup> Pressure adjustment using tape is recommended.

## Film Physical Properties

	Unit	Measurement Method	LIMEX Shopping Bag	
			HDPE 20μm	LLDPE 70μm
Tensile Strength (MD/TD)	MPa	JIS Z 1702	34 / 24	19 / 12
Tensile Elongation (MD/TD)	%	JIS Z 1702	240 / 480	450 / 650
Heat-Seal Strength (flat)	N/15mm	JIS Z 1711	8.3	11.0
Heat-Seal Strength (gazette)	N/15mm	JIS Z 1711	15.8	—
Static Load	kg	TBM Method	18	7
Vibration Load		TBM Method	5 kg @ 1 hour	3 kg @ 1 hour
Dart Impact @ 90 g	failure/test	JIS Z 1724-1	0/10	0/10

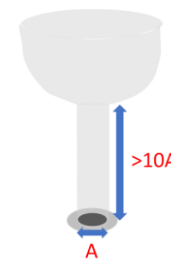
※ Above is representative value, NOT guaranteed value.

## Extrusion / Inflation Requirements

	zone1	zone2	zone3	zone4	Extruder 1	Extruder 2	Blow Rate	Blow Position
LIMEX Shopping Bag HDPE ( 20~30μm )	190°C	190°C	200°C	200°C	200°C	200°C	3.5-4.5	>10 times Extruder
LIMEX Shopping Bag HDPE ( 40μm~ )	190°C	190°C	200°C	200°C	200°C	200°C	1.5-3.0	>10 times Extruder
LIMEX Shopping Bag LLDPE ( 40μm~ )	190°C	190°C	200°C	200°C	200°C	200°C	1.5-3.0	—

## Processing Cautions

- Start-up with PE resin only, then switching to LIMEX recipe after stabilizing will allow smooth processing.
- Below #60 filter is recommended for long-time processing.
- Material drying is recommended in case of bubble occurrence.
- Recommended drying conditions ( 1000 kg of material ): 90°C de-humidifier for 30 minutes  
Avoid drying longer than 60 minutes even when extremely wet.



## Product Use Instructions

- Please avoid high temperature or direct sunlight for storage.
- This product can be affected by moisture.  
Indoor storage with certain temperature control, and no contact with water ( e.g. raindrops ) is recommended.
- Recommended drying conditions ( 1000 kg of material ): 90°C de-humidifier for 30~60 minutes
- Please avoid moisture, dust and dirt for storage after un-packaging. Please tightly seal when re-packaging.  
Drying after each un-packaging is recommended.
- Please avoid use near fire.