

TECHNICAL DATA SHEET

BOPE



Traditionally, heat-sealed packaging structures often consist of cast or blow-molded PE for the inner layer and BOPP, BOPET, or BOPA for the outer layer, which is not easily recyclable due to the different materials of each layer. BOPE film is a good solution to this problem: BOPE film is made of special polyethylene pellets, with a bi-directional stretching process, so it is lightweight and a mono packaging material with the advantage of being a recyclable material. BOPE film offers innovative solutions to solve plastic environmental problems and promotes the circular economy.

Product Features

- It retains the toughness of polyethylene while showing good physical properties such as stiffness, tensile strength, and flatness, so it is suitable for processing such as printing and lamination.
- Resistant to low temperature and impact, puncture resistance. It can effectively reduce the rate of packages broken, reduce the quantity of packaging materials, and provide environmentally friendly.
- Compared with traditional PE film, BOPE glossy film has good transparency and lower haze, BOPE heat seal film has high heat seal strength, BOPE anti-haze film has a good anti-haze effect, and BOPE matte film has a uniform matte effect and fewer crystal spots.
- Without changing the performance pre-condition, the material is thinned by 30-50% to realize the light weight of the packaging.
- Flexible packaging laminated structure is fully PE, which can be recycled.
- Give the product packaging easy to tear function, and upgrade the consumer's experience of convenience packaging.

Product Applications

- Single-layer packaging: Fully automatic packaging and flower packaging
- Laminated packaging: It can be used as the surface layer, middle layer, or inner layer of the laminated packaging structure, suitable for food, daily chemical, daily products, chemical, pharmaceutical, low-temperature frozen packaging, self-adhesive label and coating processing, and other applications.

Typical Physical Properties

Item		Test Method	Unit	Glossy type	Matte type	Heat seal type	Anti-haze type
Thickness	GB/T6672	GB/T 6672	μm	20-50, requirements can be customized according to customer requirements			
Tensile Strength	MD	GB/T 1040.3	MPa	>70	≥60	>60	≥60
	TD			≥150	≥150	≥150	≥150
Nominal Strain at Breakage	MD		%	≤260	≤260	≤300	≤320
	TD			≤95	≤95	≤95	≤100
Heat Shrinkage Rate	MD	100°C, 2min	%	≤6.0	≤6.0	≤6.0	<6.0
	TD			≤10.0	≤10.0	≤10.0	≤10.0
Friction Coefficient	Corona Side	GB/T 10006	/	≤0.4	≤0.4	≤0.4	≤0.4
	No Corona Side			≤0.4	≤0.4	≤0.4	≤0.4
Haze		GB/T 2410	%	≤4.0	≥55	≤5.0	≤6.0
Glossy		GB/T 8807	%	≥80	≤15	≥75	≥75
Wetting Tension	Corona Side	GB/T14216	mN/m	≥38	≥38	≥38	≥38
Heat Seal Strength		100°C, 0.18map, 1s	N/15mm	/	≥5.0	≥5.0	≥5.0
Density		GB/T 6343	g/cmm ³	0.924	0.91	0.923	0.916