KHAT2125F

1. Product Description

KHAT2125F is a biodegradable PBAT modified material launched by Kanghui New Material Technology Co, Ltd. The main components of the product are completely biodegradable polyester PBAT, polylactic acid and starch, the film products have excellent mechanical properties.

KHAT2125F is mainly applicable to blow molding processing of film products, typical products include but not limited to supermarket shopping bags, courier bags, clothing bags, industrial product package.

KHAT2125F exhibits the following properties:

- High melt strength
- Excellent processability on conventional LDPE blown film lines
- Good mechanical properties
- Typical thicknesses: 15-100 μm
- Good processability on bag making equipment
- Good thermostability up to 230℃

Typical Basic Material Properties of KHAT2125F

Property	Unit	Test Method	KHAT2125F
Mass Density	g/cm³	ISO 1183	1.25±0.02
Tensile Strength	MPa	ISO 527	14±2
Elongation At Break	%	ISO 527	≥350
190℃/2.16kg Melt Flow Rate MFR 190°C, 2.16kg	g/10 min.	ISO 1133	≤5
Melting Points	℃	ISO3146	110—130
Thermal Decomposition Temperature	℃	ASTM D6370	230

Typical Properties of KH2125F

Property	Unit	Test Method	KHAT2125F
Tensile Strength MD/TD	MPa	ISO 527	23/20±2
Elongation at Break MD/TD	%	ISO 527	400/600±50
Tear Resistance MD/TD	N/mm	ISO 6383	120/130±10
Sealing Temperature	℃	--	180—230
Sealing Strength	N/15mm	ISO 527	≥15

2. Usage

a. Packaging

- in 25kg bag, liner: PE/Alu
- in 800kg bag, liner: PE/Alu

b. Storage

During transportation and storage, the temperature should not exceed 55℃. Storage time of unopened products may not surpass 12 month at room temperature 23℃.

c. Shelf-life

For granules: KHAT2125F is recommended to be used immediately after package opened. If customers need to open bags and use them partially, once package opened, we recommend to seal again properly and use it up as soon as possible.

For film: we suggest customers use it within 8 months.

d. Extruder selection

LDPE blowing machine is applicable (high pressure die head), length-diameter ratio of film blowing machine should be ≥ 30.

e. Processing temperature

It is suggested that each heating section of the extruder is gradually increased from 145℃ to 150℃. The temperature for headpiece should be controlled at around 150-155℃. It can be properly adjusted according to the conditions of each blowing machine.

f. Blow-up ratio

The film blow-up ratio can be adjusted according to the demand of the film thickness. Preferably around 2.5-3。

g. Blending

When the MFR is suitable, KHAT2125F is compatible with other biodegradable polymer materials, such as PBAT, Calcium carbonate master batch. Customers can make mixed film blowing in different proportions according to their own equipment and processing conditions.