COMPOSTABLE & BIODEGRADABLE

MATERIALS

Compostable and Biodegradable Resins are materials that can break down naturally, reducing their environmental impact. ‘Biodegradable’ means they can be broken down by microorganisms over time, while ‘compostable’ means that they break down into nutrient-rich compost under specific conditions.

PBAT

CAS NO. : 55231-08-8
Appearance: Natural White Resin

Items	Standard	Unit	PBAT
Density	ISO 1183	g/cm³	1.22 ± 0.03
Melting Point	ISO 11357	°C	115~125
Melt Flow Index	ISO 1133	g/10min (190 °C, 2.16kg)	≤5
Tensile Strength at Break	ISO 527	MPa	≥18
Elongation at Break	ISO 527	%	≥500
Moisture Content	ISO 15512	%	≤0.1

PLA

CAS NO. : 33135-50-1
Appearance: Transparent or Translucent

Items	Standard	Unit	PLA
Density	ISO 1183	g/cm³	1.25
Melting Point	ISO 11357	°C	140~170
Melt Flow Index	ISO 1133	g/10min (190 °C, 2.16kg)	2~20
Tensile Strength at Break	ISO 527	MPa	≥55
Elongation at Break	ISO 527	%	≥5
Notch Impact Strength	GB/T9345.1	KJ/M²	≥2

TRBF90

Component: Corn starch、PBAT、PLA
Appearance: Light Yellow Resin

Items	Standard	Unit	TRBF90
Density	ISO 1183	g/cm³	1.15~1.2
Melting Point	DSC, 10°C/min	°C	120~130
Melt Flow Index	ISO 1133	g/10min (190°C, 2.16kg)	≤8
Tensile Strength (MD)	ISO 527	MPa	≥ 20
Tensile Strength (TD)	ISO 527	MPa	≥15
Elongation at Break (MD)	ISO 527	%	≥180
Elongation at Break (TD)	ISO 527	%	≥400
Elmendorf Tear (MD)	ISO 6383	mN	≥1000
Elmendorf Tear (TD)	ISO 6383	mN	≥2500

TRBF96

Component: PBAT、PLA
Appearance: Nature White Resin

Items	Standard	Unit	TRBF96
Density	ISO 1183	g/cm³	1.18~1.23
Melting Point	DSC, 10°C/min	°C	130-150
Melt Flow Index	ISO 1133	g/10min (190 °C, 2.16kg)	≤10
Tensile Strength (MD)	ISO 527	MPa	≥25
Tensile Strength (TD)	ISO 527	MPa	≥15
Elongation at Break (MD)	ISO 527	%	≥120
Elongation at Break (TD)	ISO 527	%	≥200
Elmendorf Tear (MD)	ISO 6383	mN	≥750
Elmendorf Tear (TD)	ISO 6383	mN	≥1000

These resins are often used as alternatives to traditional plastics, which can persist in the environment for hundreds of years. Compostable and Biodegradable Resins offer a more sustainable option, as they can return to the natural cycle and contribute to soil health when properly disposed of.