Cardia Compostable™ B-F

Thermoplastic Starch + Copolyester

Cardia Bioplastics™

Message:

Cardia Compostable B-F is a biodegradable and compostable resin based on a blend of thermoplastic starch (TPS), aliphatic polyesters and natural plasticizers. This grade of resin is compatibilised to offer a high level of mechanical strength, outstanding elongation properties and toughness. The resin is based on corn starch which is a renewable material.
Cardia Compostable B-F resin is certified biodegradable during composting in professionally managed composting facilities.
Complies with International Standard ISO16929, ISO 14855
Certified compostable for blown film applications up to 120 microns.
Cardia Compostable B-F complies with:
European Standard EN13432,
USA Standard ASTM 6400,
Australian Standard AS 4736 and
Japanese "GreenPla" Standard
Chinese Environmental Labelling.
Cardia Compostable B-F is a completely biodegradable polymer suitable for the manufacturing of film-type products. It can be directly used in the film blowing process. It does not contain any non-degradable polymers such as PE, PP, PS and PVC. Independent university testing shows that after biodegradation Cardia Compostable B-F does not leave any harmful residues.
This film grade has been evaluated for compostability in accordance with international standard ISO 16929 (2002-11- 01) "Plastics — Determination of the Degree of Disintegration of Plastic Materials under Defined Composting Conditions in a Pilot Scale Test". According to the European certification scheme for biodegradable materials, Performance Standard EN 13432, the pass threshold for this test is 90% of the material passing through a 2 mm sieve after the 12 week test period.
The testing shows that the plastic film samples used in this test are completely compostable as demonstrated by their 100% disintegration after 3 months and > 90% mineralization in less than 6 months. In the laboratory scale composting test according to ISO 14855: 1999 Cardia Compostable B-F film grade resin reached 90% biodegradation relative to cellulose reference material and meets the biodegradability requirement specified in the EN 13432 standard.
Application Examples
Compostable bags
Shopping bags/Check-out bags
Garbage bags
Leaf litter bags
Green bin liners
Produce and meat liners
Overwrap Packaging
Mulch film
Breathable film

General Information	
Features	Aliphatic
	Biodegradable
	Compostable
	Good Toughness
	High Elongation
	High Strength
	Plasticized
	Renewable Resource Content
Uses	Bags
	Film
	Heavy-duty Bags

	Liners
	Packaging

Agency Ratings	ASTM D 6400
	EN 13432
	ISO 14855

Processing Method	Blown Film

Physical	Nominal Value	Unit	Test Method
Specific Gravity	1.20	g/cm³	ASTM D792
Melt Mass-Flow Rate (MFR) (150°C/0.325 kg)	2.0	g/10 min	ASTM D1238
Moisture Content	0.45	%	Internal Method
Tear Resistance (30.0 µm)	3	N	ASTM D1922
Mechanical	**Nominal Value**	**Unit**	**Test Method**
Tensile Strength			ASTM D883
Yield	> 20.0	MPa	
Break	> 15.0	MPa	
Tensile Elongation (Break)	> 500	%	ASTM D883
Films	**Nominal Value**	**Unit**	**Test Method**
Dart Drop Impact	250	g	ASTM D1709
Oxygen Transmission Rate (Wet)	1180	cm³/m²/24 hr	ASTM F1927
Thermal	**Nominal Value**	**Unit**	**Test Method**
Peak Melting Temperature	90.0 to 130	°C	ASTM D3418

Recommended distributors for this material

Susheng Import & Export Trading Co.,Ltd.

Tel: +86 21 5895 8519

Phone: +86 13424755533

Email: sales@su-jiao.com

No. 215, Lianhe North Road, Fengxian District, Shanghai, China