Cardia Biohybrid□?BL-M

Thermoplastic Starch + PP

Cardia Bioplastics™

Message:

Cardia Biohybrid™ BL-M is based on a blend of thermoplastic starch (TPS) and polyolefin's. This grade of resin is compatibilised to offer a high level of mechanical strength, good elongation properties and toughness. The resin is based on corn starch which is an annually renewable material.
A hybrid masterbatch with high content of renewable resources in Polypropylene (PP) for moulding rigid products.
For applications where the use of renewable resources or sustainability are desired and Biodegradability is not required.
Can be used by blending Cardia Biohybrid™ BL-M masterbatch with PP in injection moulding and extrusion applications.
Cardia Biohybrid™ BL-M is formulated with 66% of annually renewable starch. This versatile material is suitable for a wide range of products manufactured by injection molding, extrusion or blow molding processes. Due its content of polyolefins the material is not a fully biodegradable polymer and is not intended for ultimate disposal in commercial composting facilities. For applications in which biodegradability/compostability is required we recommend the usage of Cardia Compostable B-M or T-BM resin.
Application Examples
Injection moulded products such as cutlery, toothbrushes, combs, shavers, golf-tees, etc.
Stakes and pegs
Horticultural products such as flower pots, planters and stakes
Injection moulded caps and closures
Sheet extruded products such food trays, tubs, disposable plates, strapping and labels
Blow moulded bottles and toys
Profile extruded products such as candy sticks and disposable drinking straws

General Information	
Features	High strength
	Updatable resources
	Good toughness
	Compliance of Food Exposure
	Extended tensile rate
Uses	Label
	Lawn and Garden Equipment
	Personal care
	Shield
	Mixing
	Masterbatch
	Belt material
	Sheet
	Bottle
	Shell
	Toys
	Profile
	Toothbrush handle
	Disposable tableware
	Beverage straw
	Bracket tray

Agency Ratings	European 2002/72/EC
Processing Method	Blow molding Extrusion Injection molding

Physical	Nominal Value	Unit	Test Method
Specific Gravity	1.11	g/cm³	ASTM D792
Melt Mass-Flow Rate (MFR) (190°C/2.16 kg)	3.6	g/10 min	ASTM D1238
Moisture Content		%	Internal method
Biobased Content - Starch	66	%	
Mechanical	**Nominal Value**	**Unit**	**Test Method**
Tensile Modulus	> 23.0	MPa	ASTM D638
Tensile Strength			ASTM D638
Yield	> 23.0	MPa	ASTM D638
Fracture	> 23.0	MPa	ASTM D638
Tensile Elongation (Break)	> 150	%	ASTM D638
Impact	**Nominal Value**	**Unit**	**Test Method**
Notched Izod Impact	3.4	kJ/m²	ASTM D256
Thermal	**Nominal Value**	**Unit**	**Test Method**
Peak Melting Temperature	90.0 - 100	°C	ASTM D3418
Additional Information	**Nominal Value**	**Unit**	

Above properties are based on a typical test molding made from a blend of 30% BL-M, and 70% PP

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