Cardia Biohybrid[™] H-M01

Thermoplastic Starch + PE

Cardia Bioplastics[™]

Message:

Cardia Biohybrid[™] H-M01 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 impact resistance and toughness. The resin is based on corn starch which is a renewable material.

A biohybrid resin offering a significant reduction in carbon footprint (compared to polyolefins PE/PP)

An effective contribution to sustainability where biodegradability/compostability is not required

Designed for thin and thick gauge rigid moulding and extrusion applications.

Cardia Biohybrid[™] H-M01 is formulated with 50% of renewable thermoplastic starch polymer. This resin is suitable for a wide range of products manufactured by injection moulding or extrusion processes. Due to its content of polypropylene the material is not a fully biodegradable polymer and it is not intended for ultimate disposal in commercial composting facilities. If biodegradability or compostability is required, use of Cardia Compostable B-M or TBM resin is recommended.

Application Examples

Injection moulded products such as cutlery, toothbrushes, combs, shavers, golf-tees, etc.

Stakes and pegs

kg)

Horticultural products such as flower pots and stakes Injection moulded containers, caps and closures

Disposable plates and produce trays

Features Food Contact Acceptable Good Impact Resistance Good Toughness High Strength Renewable Resource Content Uses Caps Closures Closures Containers Disposable Tableware Lawn and Garden Equipment Personal Care Support Trays Table Products Toothbrush Handles Toothbrush Handles Processing Method Extrusion Injection Molding Unit Test Method Physical Nominal Value Unit Test Method	General Information					
Good Toughness High Strength Renewable Resource ContentHigh Strength Renewable Resource ContentUsesCapsClosures Containers Disposable Tableware Lawn and Garden Equipment Personal Care Support Trays Table Products Toothbrush HandlesAgency RatingsEU 2002/72/ECProcessing MethodEU 2002/72/ECPhysicalNoninal ValueUnitTest Method	Features	Food Contact Acceptable				
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Injection Molding Physical Nominal Value Unit Test Method	Agency Ratings	EU 2002/72/EC				
Physical Nominal Value Unit Test Method	Processing Method	Extrusion				
		Injection Molding				
Density 1.07 g/cm³ ASTM D4883	Physical	Nominal Value	Unit	Test Method		
	Density	1.07	g/cm³	ASTM D4883		

g/10 min

ASTM D1238

3.1 to 4.7

Molding Shrinkage - Flow	1.0	%	
Mechanical	Nominal Value	Unit	Test Method
Tensile Strength (Break)	> 15.0	MPa	ASTM D638
Tensile Elongation (Break)	> 16	%	ASTM D638
Impact	Nominal Value	Unit	Test Method
Notched Izod Impact	9.7	J/m	ASTM D256
Thermal	Nominal Value	Unit	Test Method
Peak Melting Temperature	150 to 165	°C	ASTM D3418
Additional Information	Nominal Value	Unit	
Biobased Content - Starch	50	%	

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