

# Cardia Biohybrid™ H-M03

Thermoplastic Starch + PP

Cardia Bioplastics™

Message:

Cardia Biohybrid™ H-M03 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-M03 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

Horticultural products such as flower pots and stakes

Injection moulded containers, caps and closures

Disposable plates and produce trays

General Information			
Features	Food Contact Acceptable		
	Good Impact Resistance		
	Good Toughness		
	High Strength		
	Renewable Resource Content		
Uses	Caps		
	Closures		
	Containers		
	Disposable Tableware		
	Lawn and Garden Equipment		
	Pacifiers		
	Personal Care		
	Support Trays		
	Table Products		
	Toothbrush Handles		
Agency Ratings	EU 2002/72/EC		
Processing Method	Extrusion		
	Injection Molding		
Physical	Nominal Value	Unit	Test Method
Density	1.17	g/cm <sup>3</sup>	ASTM D4883

Melt Mass-Flow Rate (MFR) (190°C/2.16 kg)	3.4	g/10 min	ASTM D1238
Molding Shrinkage - Flow	1.0	%	
<b>Mechanical</b>	<b>Nominal Value</b>	<b>Unit</b>	<b>Test Method</b>
Tensile Strength (Break)	> 15.0	MPa	ASTM D638
Tensile Elongation (Break)	> 10	%	ASTM D638
<b>Impact</b>	<b>Nominal Value</b>	<b>Unit</b>	<b>Test Method</b>
Notched Izod Impact	9.7	J/m	ASTM D256
<b>Thermal</b>	<b>Nominal Value</b>	<b>Unit</b>	<b>Test Method</b>
Peak Melting Temperature	150 to 165	°C	ASTM D3418
<b>Additional Information</b>	<b>Nominal Value</b>	<b>Unit</b>	
Biobased Content - Starch	50	%	

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#### 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

