

## Cardia Compostable B-M

### Moulding Grade Resin

Biodegradable during Composting in Professionally Managed Facilities

#### Description

Cardia Compostable B-M is a biodegradable and compostable resin based on a blend of thermoplastic starch (TPS), biodegradable polyesters and natural plasticizers. This grade of resin is compatibilised to offer a high level of mechanical strength, impact resistance and toughness. The resin is based on corn starch which is a renewable material.

- A biodegradable and compostable resin
- Greater than 98% biodegradability when tested to ISO14855
- Designed to be used for injection moulding and profile extrusion

#### Specifications and Compliances

Cardia Compostable B-M resin is fully biodegradable during composting in professionally managed composting facilities.

- Complies with International Standard ISO16929, ISO 14855
- Cardia Compostable B-M complies with
  - European Standard EN13432,
  - USA Standard ASTM 6400,
  - Australian Standard AS 4736 and
  - Japanese “GreenPla” Standard
  - Chinese Environmental Labelling.

#### Application Examples

- Biodegradable injection moulded products such as cutlery, toothbrushes, combs, shavers, golf-tees, plant markers, etc.
- Extruded tubes and rods
- Biodegradable stakes and pegs
- Biodegradable tags
- Extruded pipes
- Injection moulded containers, caps and closures
- Compostable rigid products if wall thickness is kept below 1 mm.

#### Physical Properties of Cardia Compostable B-M

<i>Property</i>	<i>Test Method</i>	<i>Typical Value</i>	<i>Unit</i>
Melt Flow Index	ASTM D1238	9	g/10 min (190°C / 2.16 kg)
Density	ASTM D792	1.2	g/cm <sup>3</sup>
Moisture Content	CBP Method	<0.6	%
Tensile Strength at Break	ASTM D638	19.8	MPa
Tensile Modulus (Elastic, Youngs)	ASTM D638	1317	MPa
Charpy Impact Strength	DIN 179-1	23.5	J/m

## **Transport, Storage and Handling**

Cardia Bioplastics Materials should be transported, stored and handled in cool and dry environments without exposure to direct sunlight. More information can be retrieved from the Processing Guidelines available through your Cardia Bioplastics sales representative.

## **Safety**

Material Safety Data Sheets (MSDS) are available. Please contact your Cardia Bioplastics sales representative.

## **Processing Conditions**

Cardia Compostable™ B-M materials can be easily processed on standard plastic process equipment. Processing guidelines are unique to this material and are available on request from the Cardia Bioplastics sales representative.

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