



# ECOMICRO

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Product Catalog



## Product Profile and Applications

Product Code	Base Resin	Application Resin	Necessary Ingredient Load	Potential Finished Products / End Uses	Production Method
BCA-502MB	LLDPE	LLDPE LDPE HDPE PP	3% and up	Washing machine, electronic goods, air conditioners, chopping boards, industrial goods, car interior, etc...	Extrusion
BCA-503MB	PLA	PLA	5% and up	Biodegradable products, Food Plastic wrap, food container, water bottle, tupperware, etc..	Blow molding, Laminating, Blown Film Extrusion
BCA-504MB	SAN	SAN	5% and up	Transparent tupperware container, cosmetic case, household electric appliance, etc.	Extrusion
BCA-505MB	PP	PP	5% and up	Flexible packaging film, CPP film	Blown Film Extrusion, Blow molding
BCA-506MB	ABS	ABS	5% and up	Household electrical appliances, car components, office supplies	Extrusion



## Current Products

Currently, our partners in Korea have created numerous products that utilize the BioCleanAct™ technology. These products are currently selling across the Asian marketplace.

Current Products on the Market:

- Anti-microbial Medical Devices (e.g. catheters, iv bags, tubing, etc.)
- Airtight Tupperware Containers
- Commercial Packaging for food
- Vacuum-Sealable Bags
- Kitchen Chopping Boards
- Toothbrushes
- Air Conditioners
- Washing Machines
- Cosmetic Packaging
- Water Purifiers

MST Korea's Research and Development team continue to explore new finished products that can be fortified with the BioCleanAct™ technology. Meanwhile ECO-MICRO's marketing team and business development department looks to make further strategic relationships with plastic manufacturers who require superior anti-microbial characteristics.



1. Base Resin : LLDPE

2. Application Resin : LLDPE, LDPE, HDPE, PP

3. Applications, End Uses, and Production Methods

Necessary Ingredient Load	Potential Finished Products / End Uses	Production Method
3% and up	Industrial goods, flexible packaging, laminating film, drinking water tanks, kitchen chopping board, electronics, etc.	Extrusion
5% and up	Any PE application needing anti-microbial benefits ( PP )	Blow Molding, Blown Film Extrusion, Laminating

4. Effect

BCA - 502MB displays superior anti-microbial qualities, and has excellent mechanical properties and thermal resistance. It is suitable for use where bonding strength and/or heat resistance is required.

5. Physical Properties

Test	Units	Test Method (ASTM)	Result
Density	g/cm <sup>2</sup>	D1905	.921
Melt Index.	g/10min	D1238	12.00
Softening Point	C°	D1525	85
Tensile Creep	Kg/cm <sup>2</sup>	D0638	110
Rupture Strength	Kg/cm <sup>2</sup>	D0638	130
Creep Rupture (Elongation)	%	D0638	550
Cold shortness Temp.	C°	D0746	< -70

6. Packaging : 25 Kg / Paper Bag

7. Caution : For maximum efficacy keep the raw resin in air-tight packaging, avoid direct sunlight, and keep at room temperature during transport and in storage.



1. **Base Resin** : PLA (Poly Lactide Resin)

2. **Application Resin** : PLA

3. **Applications, End Uses, and Production Methods**

Necessary Ingredient Load	Potential Finished Products / End Uses	Production Method
5% and up	Biodegradable Plastic Products, Food packaging, plastic bags, flexible film (PET, Nylon, etc), tupperware, disposable beverage bottles, etc.	Blown Film Extrusion, Blow Molding

4. **Effect**

BCA - 503MB has excellent anti-microbial characteristics and has excellent mechanical properties and thermal resistance. It is suitable for use where bonding strength and/or heat resistance is required.

5. **Physical Properties**

Test	Units	Test Method (ASTM)	Result
Density	g/cm <sup>2</sup>	D1505	1.25
Melt Index.	g/10min	D1238	4.8
Softening Point	C°	D1003	160
Tensile Creep	Psi	D0882	8700
Rupture Strength	Psi	D0882	7700

6. **Packaging** : 25 Kg / Paper Bag

7. **Caution** : For maximum efficacy keep the raw resin in air-tight packaging, avoid direct sunlight, and keep at room temperature during transport and in storage.



1. Base Resin : SAN

2. Application Resin : SAN

### 3. Applications, End Uses, and Production Methods

Necessary Ingredient Load	Potential Finished Products / End Uses	Production Method
5% and up	Transparent receptacles, cosmetic cases, clear tupperware, household appliances, etc.	Extrusion

### 4. Effect

BCA - 504MB displays superior anti-microbial qualities, and has excellent mechanical properties and thermal resistance. It is suitable for use where bonding strength and/or heat resistance is required.

### 5. Physical Properties

Test	Units	Test Method (ASTM)	Result
Density	g/cm <sup>2</sup>	D0792	1.07
Melt Index.	g/10min	D1238	18
Softening Point	C°	D1525	101
Tensile Creep	Kg/cm <sup>2</sup>	D0638	680
Rupture Strength	Kg/cm <sup>2</sup>	D0638	31,400
Creep Rupture (Elongation)	%	D0638	6

6. Packaging : 25 Kg / Paper Bag

7. Caution : For maximum efficacy keep the raw resin in air-tight packaging, avoid direct sunlight, and keep at room temperature during transport and in storage.



1. Base Resin : PP

2. Application Resin : PP

3. Applications, End Uses, and Production Methods

Necessary Ingredient Load	Potential Finished Products / End Uses	Production Method
3% and up	Housewares, school supplies, pens, food containers, etc.	Extrusion
5% and up	Flexible packaging film, various anti-microbial packages such as CPP film	Blown Film Extrusion, Blow molding

4. Effect

BCA - 505MB displays superior anti-microbial qualities, and has excellent mechanical properties and thermal resistance. It is suitable for use where bonding strength and/or heat resistance is required.

5. Physical Properties

Test	Units	Test Method (ASTM)	Result
Density	g/cm <sup>3</sup>	D1905	.962
Melt Index.	g/10min	D1238	12.00
Softening Point	C°	D1525	152
Tensile Creep	Kg/cm <sup>2</sup>	D0638	340
Rupture Strength	Kg/cm <sup>2</sup>	D0638	100
Creep Rupture (Elongation)	%	D0638	> 550

6. Packaging : 25 Kg / Paper Bag

7. Caution : For maximum efficacy keep the raw resin in air-tight packaging, avoid direct sunlight, and keep at room temperature during transport and in storage.