



M.G. Polyblends



MG Polyblends can help turn your most challenging product dreams into reality. Thanks to new generation facilities like a state-of-the-art **Twin Screw Extruder** (from **Freesia Macross Corporation, Japan**) and a sophisticated laboratory, We offer you a wide range of masterbatches for Extrusion, Injection Moulding, Blow Moulding, Rotomoulding, Thermoforming etc. Most importantly, we offer excellent quality, consistency and reproducibility – in every masterbatch, every time.



Product Specification

In general, normally available PET based master batches does not give proper dispersion during the manufacturing of bigger size PET bottles. These master batches adversely affect the I.V of the resin and hence there is variation in thickness of the bottles. Separation of layers is also observed which decreases the strength of the bottles.

To avoid these drawbacks, **M.G.Polyblends** has successfully developed a colour master batch which consists of PET compatible low molecular weight polymer as a carrier resin along with some specialty dispersing agent, processing aid and stabilizer. This masterbatch has no effect on the I.V value of the polymer and hence there is no variation in the thickness as well strength of the bottles.

Appearance	Dust free micro granules									
Carrier Resin	PET compatible low molecular weight Wax.									
General Properties	<table border="1"><thead><tr><th>S.NO</th><th>PROPERTIES</th><th>VALUES</th></tr></thead><tbody><tr><td>1.</td><td>BULK DENSITY</td><td>0.551</td></tr><tr><td>2.</td><td>MOISTURE CONTENT</td><td>Less than 0.1%</td></tr></tbody></table>	S.NO	PROPERTIES	VALUES	1.	BULK DENSITY	0.551	2.	MOISTURE CONTENT	Less than 0.1%
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1.	BULK DENSITY	0.551								
2.	MOISTURE CONTENT	Less than 0.1%								
Recommended Dosage	0.05-0.2% (as per requirement)									
Applications	PET Bottles									
Product Grades	For more details please refer to micro beads for PET master batches grade sheet									
Packaging	Material is packed in 10 Kg fiber drum.									



PET MICRO BEADS GRADES SHEET

PRODUCT	PRODUCT CODE	CARRIER RESIN	RECOMMENDED DOSE LEVEL	APPLICATIONS
PET WHITE MB	W-1080	PET Compatible Wax	0.8-1.2% (Depending on the colour required)	PET Bottles
PET AMBER MB	BR-8018	PET Compatible Wax	0.05-0.2% (Depending on the colour required)	PET Bottles
PET AMBER MB (Pharma)	BR-8009	PET Compatible Wax	0.15-0.2% (Depending on the colour required)	PET Bottles
PET AMBER MB (Pharma)	BR-8009-G	Polyester / PET	0.2-0.25% (Depending on the colour required)	PET Bottles
PET AMBER MB (Pharma)	BR-8009-L	Polyester / PET	0.75-1% (Depending on the colour required)	PET Bottles
PET BLUE MB	B-6103	PET Compatible Wax	0.1-0.2% (Depending on the colour required)	PET Bottles
PET BLUE MB	B-6052	PET Compatible Wax	0.05-0.2% (Depending on the colour required)	PET Bottles
PET ORANGE MB	O-3021	PET Compatible Wax	0.05-0.2% (Depending on the colour required)	PET Bottles
PET YELLOW MB	Y-4088	PET Compatible Wax	0.05-0.2% (Depending on the colour required)	PET Bottles
PET RED MB	R-2059	PET Compatible Wax	0.05-0.2% (Depending on the colour required)	PET Bottles
PET PEARL MB	W-1051-P-1	PET Compatible Wax	0.5-1.5% (Depending on the colour required)	PET Bottles
PET GREEN MB	G-5071	PET Compatible Wax	0.05-0.2% (Depending on the colour required)	PET Bottles
PET PARROT GREEN MB	G-5070	PET Compatible Wax	0.05-0.2% (Depending on the colour required)	PET Bottles
PET PEACOCK GREEN MB	G-5069	PET Compatible Wax	0.05-0.2% (Depending on the colour required)	PET Bottles
BISLERI GREEN MB	G-5112	PET Compatible Wax	0.05-0.2% (Depending on the colour required)	PET Bottles
SPRITE GREEN MB	G-5116	PET Compatible Wax	0.05-0.2% (Depending on the colour required)	PET Bottles
VIOLET MB	V013	PET Compatible Wax	0.05-0.2% (Depending on the colour required)	PET Bottles



The information given below in this document is only a recommendation, believed to be reliable and is given in good faith but without warranty. Users are advised to test the product to ascertain the suitability for the intended use



Usage Method (Case Study)

A trial of **PET Amber colour** master batch was taken on an Injection blow moulding machine having master batch dosing unit and found results as discussed below:

MACHINE USED	:	ASB-PF6-2B
RAW MATERIAL USED	:	PET (Reliance Petrochemical)
PRE HEATING	:	PET was preheated at 150 deg. C for 2.5 hrs.
MOULD	:	6 Cavity mould Weight of one bottle -35 gms One shot weight -210 gms
DOSING UNIT	:	Volumetric* Master batch dosing unit was set at 60 rpm (at this rpm, it was giving 0.30 gms of master batch in 210 gms of polymer

RESULTS

- ❖ Excellent gloss
- ❖ Excellent clarity
- ❖ Excellent dispersion of dyes & pigments
- ❖ Gives required results at very low dose level of masterbatch

REMARKS

Required dose level of PET based normal master batch is 2.3 –2.6% where as required dose level of our microgranules PET master batch is 0.15 –0.2% only.

Note: *Microbeads can also be used in Gravimetric dosing unit.





Test Certification

SAMPLE DESCRIPTION : Amber Color Pharmaceuticals PET Bottles Containing Amber Master batch of MG Polyblends

S. No	Test Particulars	Obtained Value	Requirement as Per Specification	Remarks
1.	Light transmission	5.9-7.8%	Limit : NMT : 10%	Comply with USP
2.	Clarity of aqueous extract	Clear	It should be clear on visual observation	Comply with IP
3.	Non-Volatile residue	3.2 mg	Limit : NMT : 12.5 mg	Comply with IP
4.	Heavy metals	Less than 1 PPM	Limit : NMT : 1.0 PPM	Comply with IP
5.	Total terephthaloy moieties			
	a) At 50% Alcohol	abs.0.004	Limit : NMT : 0.150	Comply with USP
	b) Ethylene glycol	0.2 ppm	Limit : NMT : 1 ppm	Comply with USP
6.	Colour Extraction	Absorbance 0.005	Absorbance 0.01	Comply with USP

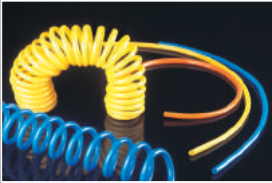
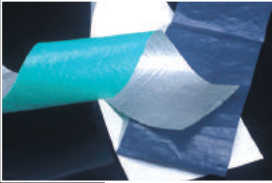
Certification of I.V

Below are the I.V Test Report provide by PET Marketing Technical Services of RELIANCE Industries for M G POLYBLEND

Sample Details	Parameter	Units	Value
Clear Bottle	IV	d1/g	0.704
White Bottle (Using MG White Microbeads)	IV	d1/g	0.695
Amber Bottle (Using Amber Microbeads)	IV	d1/g	0695



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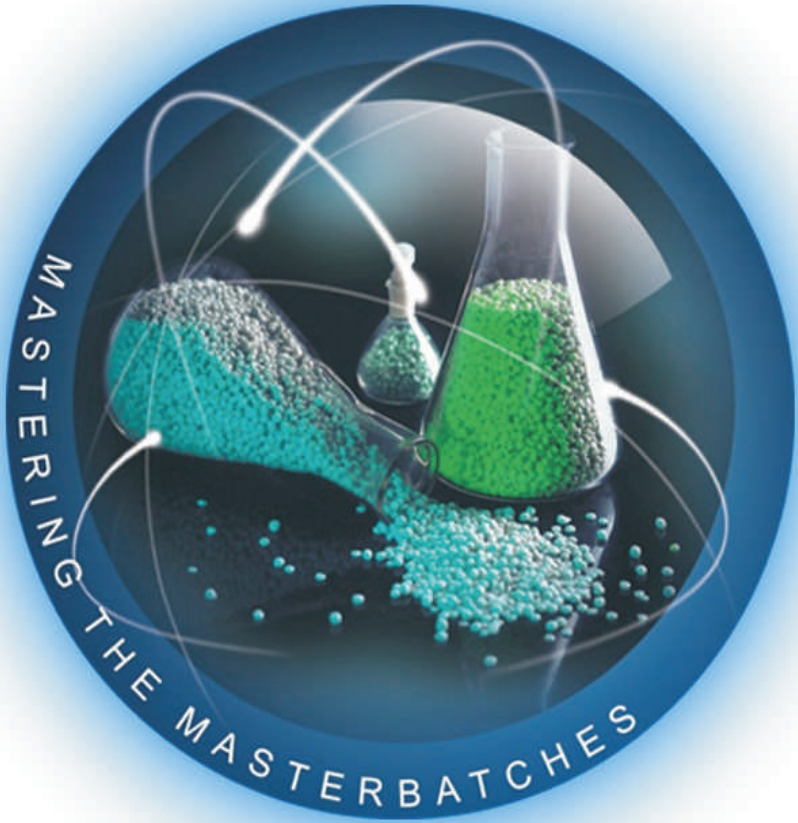


Product Spectrum

- **WHITES**
- **BLACKS**
- **STANDARD COLORS** as per RAL and PANTONE
- **SPECIAL EFFECTS** : Marble / Granite, Metallic, Fluorescent, Pearlescent, Glow-in-dark, Transparent.
- **ADDITIVES** : Antiblock, Antioxidant, UV stabilizer, Slip, Antislip, Optical Brightner, Polymer Processing Aid, Foaming Agent, Clarifier / Nucleating Agent, Antimicrobial, Anticorrosive (VCI), Antistatic, Anti Rodent.
- **Rotofoam Masterbatch for water tanks**
- **One Shot Foam Masterbatch for rotational moulding**
- **Micro Color Masterbatches / Microbeads for All Polymers (Wax Base)**
- **Silicone Masterbatch for All Applications.**
- **Mono Color / Pigment Concentrates for PE Films**
- **Masterbatches for Polyolefins (LDPE, HDPE, LLDPE , PP, BOPP).**
- **Masterbatches for Styrenics (GPPS, SAN, HIPS & ABS)**
- **Masterbatches for Engineering Plastics (nylons, PET / Polyester, Polycarbonate, PBT, etc.)**
- **Masterbatches for TPU**
- **PPR Color Masterbatches**
- **Unbreakable Compound for Rotational Moulding**
- **PET Strap Masterbatch**
- **Lubrication Masterbatch for Nylon**
- **Foam Masterbatch for HDPE Pipes**



M.G. Polyblends



Kimya Exir **ARISA**

Supplier of Raw Materials in Paint & Coating

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