

M·VERA® GP1012 (B0065)

Preliminary Technical Description



Product Description

M·VERA® GP1012 (B0065): Biodegradable polyester compound for injection moulding; due to the used natural filler, it may cause variations in color and visible inclusions

Applications: Coffee capsules, cutlery, etc.

Suitable for: Injection moulded parts

Recommended thickness range: ≤ 1 mm

Certification: OK compost HOME (NF T51-800 [11-2015], certified by TÜV AUSTRIA Belgium), OK biodegradable SOIL (ISO 17556/EN 13432, certified by TÜV AUSTRIA Belgium)

Properties

	Standard	Unit	GP1012 (B0065)
MVR 160 °C/2.16 kg	ISO 1133	cm ³ /10 min	1.8
Density	ISO 1183	g/cm ³	1.26
Renewable Content	-	%	~100
Tensile modulus	ISO 527-1/-2	MPa	2,000
Tensile strength	ISO 527-1/-2	MPa	16
Tensile strength at yield	ISO 527-1/-2	MPa	16
Elongation at yield	ISO 527-1/-2	%	3
Elongation at break	ISO 527-1/-2	%	6
Flexural modulus	ISO 178	MPa	2,690
Flexural strength	ISO 178	MPa	35
Flexural elongation	ISO 178	%	2
Charpy notched impact strength	ISO 179-1/1eA	kJ/m ²	4
Heat distortion temperature, HDT/B	ISO 75/B	°C	104

The information given here is only valid for M·VERA® grades in their original packaging, sold by BIO-FED® and/or its authorized partners. If M·VERA® grades are mixed in any capacity with foreign material, beside masterbatches recommended by BIO-FED®, BIO-FED® declines any further responsibility. M·VERA® grades shall be stored in dry, closed rooms in closed packaging in original state. For keeping the product properties, the material must be protected against direct sun and the temperature must not exceed 50 °C at any time during transport and storage. M·VERA® grades have a remaining shelf life of six (6) months at room temperature (23 °C) from the delivery date. We recommend that products made of M·VERA® grades shall be stored under same conditions. All M·VERA® products listed here can be colored with AF-Eco® masterbatches from AF-COLOR, also certified according to EN 13432. Please note that the use of AF-Eco® might influence the mechanical and/or optical properties of the final part.

The information contained herein is based on our current knowledge and experience. A legally binding promise of certain characteristics or suitability for a concrete individual case cannot be derived from this information. The information supplied here is not intended to release processors and users from the responsibility of carrying out their own tests and inspections in each concrete individual case. BIO-FED®, M·VERA® and AF-Eco® are registered brands of AKRO-PLASTIC GmbH.



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Processing Guide

Processing Recommendations

Safety Precautions:

- Processing at a melt temperature not higher than 170 °C
- Processing with adequate ventilation

Handling:

- Keep package sealed until use
- Reseal opened package of the M·VERA® product directly after use

Drying:

- Before use, material has to be dried at 80 °C for min. 5 h by using a vacuum dryer or purging with dry air (dew point -35 °C)

Delivery & Storage:

- Supply in 25 kg foil-aluminum bags or 1 ton octabin with PE-inliner
- To be stored in dry place, protected from heat and direct sun radiation

Start-up:

- Purge with polyolefin with MFR = 30 g/10 min for ~10 minutes
- Lower the temperature to recommended settings
- Start transition, when the temperature are within 10 °C of desired range

Equipment:

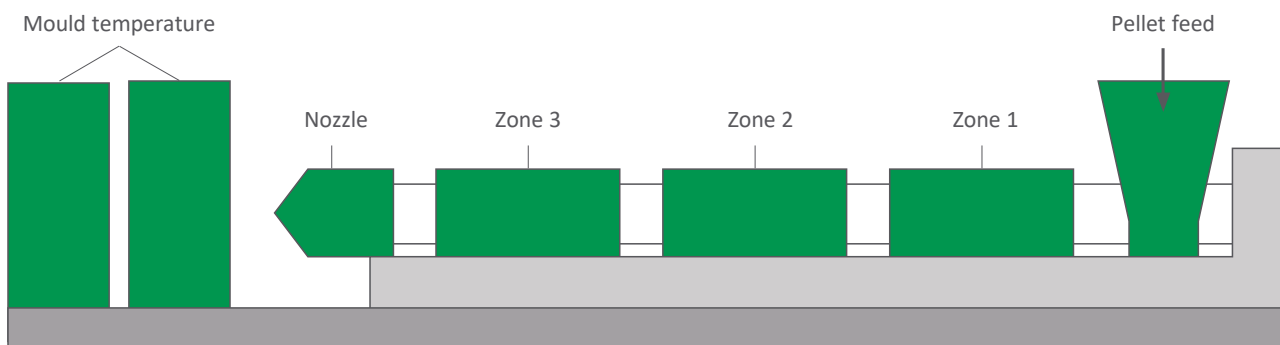
- M·VERA® grades are designed for standard equipment

Interruption & Shut-down:

- Never leave M·VERA® product in the extruder for a longer period, e.g. over night
- By interruption for a considerable time, slow down screw speed to 5 rpm approx.
- For a longer period, please purge with same polyolefin from start-up procedur

Processing Temperatures

Grade	Mould Temp.	Nozzle	Zone 3	Zone 2	Zone 1
GP1012 (B0065)	40–60 °C	130–150 °C	130–150 °C	130–150 °C	130–150 °C



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