

M·VERA® GP1037 (B0193)

Preliminary Technical Description



Product Description

M·VERA® GP1037 (B0193): Biodegradable polyester compound for injection moulding
Applications: Flexible and ductile parts
Suitable for: Injection moulded parts
Recommended thickness range: n/a
Certification: OK biodegradable SOIL - in progress
(ISO 17556/EN 13432, certified by TÜV AUSTRIA Belgium)

Properties*

| | Standard | Unit | GP1037 (B0193) |
|--------------------------------|---------------|-------------------------|----------------|
| MVR 190 °C/2.16 kg | ISO 1133 | cm ³ /10 min | 2-5 |
| Density | ISO 1183 | g/cm ³ | 1.3 |
| Biobased carbon content | ISO 16620 | % | >50 |
| Moisture** | - | % | <0.8 |
| Tensile modulus | ISO 527-1/-2 | MPa | 280 |
| Tensile strength | ISO 527-1/-2 | MPa | 8 |
| Tensile strength at yield | ISO 527-1/-2 | MPa | 8 |
| Elongation at break | ISO 527-1/-2 | % | 315 |
| Charpy notched impact strength | ISO 179-1/1eA | kJ/m ² | no break |

** before packaging

***Remark:** The aforementioned information 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 and to be protected against direct sun light not longer than 3 months. For keeping product properties, the recommended maximum temperature of 30 °C and the maximum humidity of 50 % shall not be exceeded. Products made of M·VERA® grades have to be stored under same conditions. All M·VERA® products can be colored with AF-Eco® biomasterbatches 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.



BIO-FED

Branch of AKRO-PLASTIC GmbH

BioCampus Cologne · Nattermannallee 1
50829 Cologne · Germany
Phone: +49 221 888894-00
Fax: +49 221 888894-99
info@bio-fed.com · www.bio-fed.com

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Processing Guide



Processing Recommendations

Safety Precautions:

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

Handling:

- Delivered with ready-to-use moisture content
- Keep package sealed until use
- Reseal opened package of the M·VERA® product directly after use

Drying:

- In case the M·VERA® product becomes too humid, drying at 80 °C for 4 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:

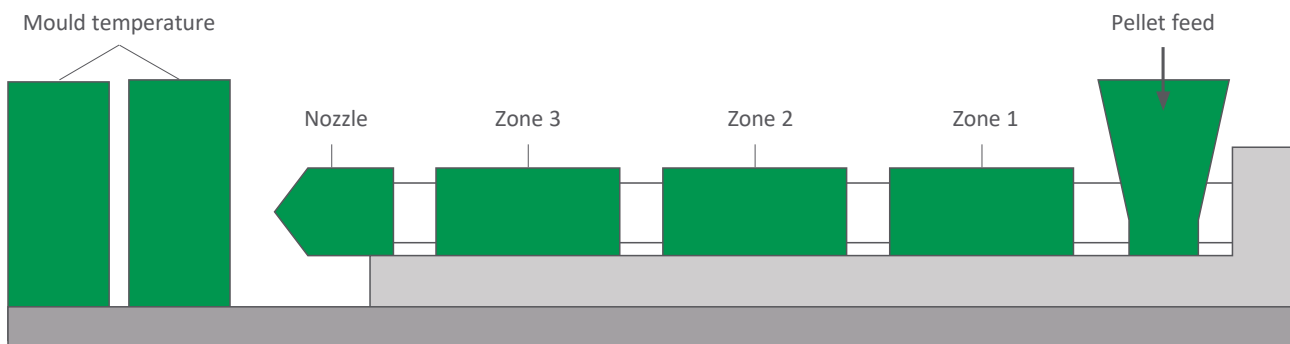
- M·VERA® grades are designed for standard equipment

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 procedure

Processing Temperatures

| Grade | Mould Temp. | Nozzle | Zone 3 | Zone 2 | Zone 1 |
|----------------|-------------|------------|------------|------------|------------|
| GP1037 (B0193) | 40–60 °C | 150–170 °C | 140–160 °C | 140–160 °C | 130–150 °C |



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