

# M·VERA® B5033 (B0199)

## Preliminary Technical Description



### Product Description

M·VERA® B5033 (B0199):	Biodegradable polyester compound for film extrusion
Applications:	Fruit & vegetable bags, etc.
Suitable for:	Mono- and multilayer films
Recommended thickness range:	18–31 µm
Certification:	OK compost HOME (NF T51-800 [11-2015], certified by TÜV AUSTRIA Belgium)

### Properties\*

	Standard	Unit	B5033 (B0199)
MVR 190 °C/2.16 kg	ISO 1133	g/10 cm <sup>3</sup>	0.5–5
Density	ISO 1183	g/cm <sup>3</sup>	1.26
Biobased carbon content	ISO 16620	%	>50
Moisture**	-	%	<0.8
Tensile modulus (MD)	ISO 527-3	MPa	250
Tensile modulus (TD)	ISO 527-3	MPa	150
Tensile strength (MD)	ISO 527-3	MPa	19
Tensile strength (TD)	ISO 527-3	MPa	20
Elongation at break (MD)	ISO 527-3	%	350
Elongation at break (TD)	ISO 527-3	%	550
Tear strength (MD)	ISO 6383	N/mm	200
Tear strength (TD)	ISO 6383	N/mm	250

\*\* before packaging (MD) = Machine direction; (TD) = Transversal direction

**\*Remark:** The mechanical values above were determined on 25 µm M·VERA® B5033 (B0199) blown film samples, processed at 150 °C with a BUR of 1:3, according to ISO 527. Please note, that the given numbers above are typical values and not to be construed as specification.

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 160 °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 = 4–7 g/10 min for ~10 minutes
- Lower the temperature to recommended settings
- Start transition, when the temperature are within 10 °C of desired range

#### Extrusion Equipment & Parameters:

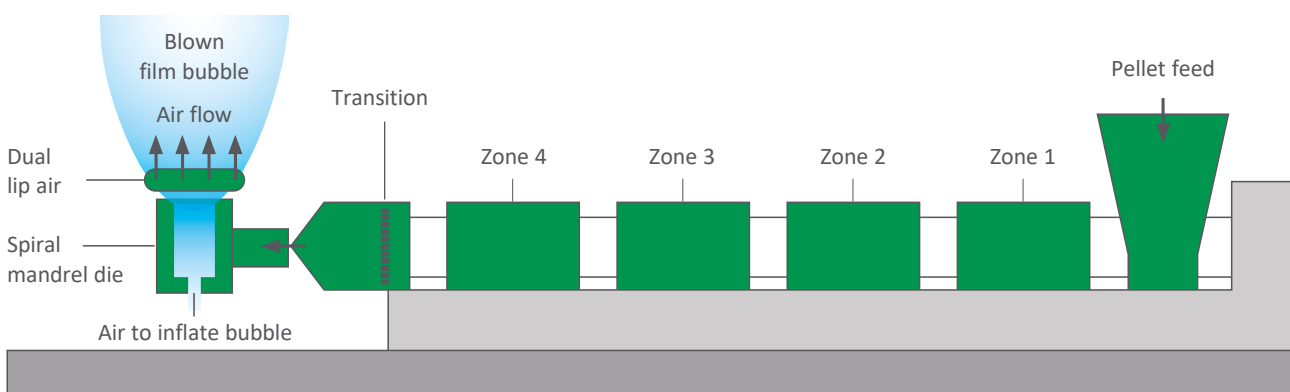
- Designed for standard extrusion lines
- Die gap: 0.5–1.6 mm
- Dual-lip air ring recommended, also IBC if possible
- Chilled air supply leads to more stable bubble on higher output rates

#### 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	Die	Transition	Zone 4	Zone 3	Zone 2	Zone 1
B5033 (B0199)	150 °C	150 °C	150 °C	150 °C	150 °C	60 °C



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