

# M·VERA® PPH4001

## Preliminary technical description

### Product description

M·VERA® PPH4001:	Biomass-balanced polypropylene compound for fibre applications		
Applications:	Melt blown etc.		
Suitable for:	Fibre extrusion technology		
Certification:	ISCC PLUS:	M·VERA® PPH4001 (B0230) CI,	
	REDcert <sup>2</sup> :	M·VERA® PPH4001 (B0231) CR	

### Properties

	Standard	Unit	PPH4001
<b>MFR 230 °C/2.16 kg</b>	ISO 1133	cm <sup>3</sup> /10 min	19
<b>Density</b>	ISO 1183	g/cm <sup>3</sup>	0.905
<b>Allocation factor<sup>a</sup></b>	-	%	100
<b>Tensile modulus</b>	ISO 527-1/-2	MPa	1,370
<b>Tensile strength at yield</b>	ISO 527-1/-2	MPa	33
<b>Elongation at yield</b>	ISO 527-1/-2	%	10
<b>Elongation at break</b>	ISO 527-1/-2	%	270
<b>Charpy notched impact strength +23 °C</b>	ISO 179-1/1eA	kJ/m <sup>2</sup>	4
<b>Charpy notched impact strength -20 °C</b>	ISO 179-1/1eA	kJ/m <sup>2</sup>	n.a.

a: The allocation factor is the percentage of biomass allocated to the product (max. value: 100 %) = percentage of replaced fossil-based resources in the value chain. The allocation factor does not indicate how much biomass is actually in the product. It refers to the organic content (e.g. polymers) in the product. n.a. = not applicable

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 twelve (12) 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-CirColor® and AF-CirCarbon® masterbatches from AF-COLOR, certified according to the sustainability standard ISCC PLUS and/or REDcert<sup>2</sup>. Furthermore AF-CirComplex® additive masterbatches are available. Please note that the use of masterbatches 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®, AF-Eco®, AF-CirColor®, AF-CirCarbon® and AF-CirComplex® are registered brands of AKRO-PLASTIC GmbH.



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# M-VERA® PPH4001

## Preliminary processing guide

### Processing recommendations

#### Safety precautions:

- Processing at a melt temperature not higher than 260 °C
- Processing with adequate ventilation

#### Handling:

- Delivered ready-to-use
- 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 20 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:

- Adjust the temperature to recommended settings
- Start transition while purging the screw, when the temperatures are within 10 °C of desired range

#### Extrusion equipment:

- M-VERA® grades are designed for standard extrusion 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.

### Processing temperatures

Grade	Die	Zone 4	Zone 3	Zone 2	Zone 1
PPH4001	220–240 °C	220–240 °C	220–240 °C	220–240 °C	210–230 °C

