## Typical properties of biodegradable M·VERA® film compounds

	Unit	M·VERA® B5019 (B0041)	M·VERA® B5029 (B0155)	M·VERA® B5033 (B0267)	M·VERA® B5037 (B0183)	M·VERA® B5039 (B0186)
Food contact approval EU 10/2011	-	√f	√f	√f	√f	√ f
Certificates	-	OK compost INDUSTRIAL	OK compost INDUSTRIAL	OK compost HOME	OK compost INDUSTRIAL	OK compost INDUSTRIAL
Biobased carbon content <sup>c</sup>	%	n.a.	n.a.	>50	n.a.	n.a.
Transparency	-	translucent	opaque	opaque	opaque	opaque
Density	g/cm³	1.23	1.41	1.30	1.51	1.45
MVR (190 °C/2.16 kg)	cm³/10 min	2–5	2–5	1–5	1–5	1–5
Tensile modulus <sup>d</sup>	MPa	1,150/470	380/175	250/150	175/160	150/145
Tensile strengthd	MPa	21/30	25/30	19/20	22/22	30/31
Elongation at break <sup>d</sup>	%	210/350	410/480	350/550	505/510	525/550
Tear strength (ISO 6383)	N/mm	12/20	105/48	200/250	150/170	105/145

<sup>&</sup>lt;sup>a</sup> product in development, preliminary data <sup>b</sup> certification in progress <sup>c</sup> ISO 16620; TC <sup>d</sup> according ISO 527-3; values were determined on 25 μm blown film samples (BUR 1:3) and given in MD/TD; MD = machine direction; TD = transversal direction <sup>e</sup> certification possible favailable on request 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 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.



**BIO-FED**Member of the Feddersen Group

BioCampus Cologne · Nattermannallee 1

50829 Cologne · Germany Phone: +49 221 88 88 94-00 Fax: +49 221 88 88 94-99

info@bio-fed.com · www.bio-fed.com

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®, M-BIOBASE®, M-CYCLOSE®, AF-Eco®, AF-CirColor®, AF-CirCarbon® and AF-CirComplex® are registered brands of AKRO-PLASTIC GmbH.



## Typical properties of biodegradable M·VERA® film compounds

	Unit	M·VERA® A5001 (B0090)	M·VERA® A5002 (B0281) <sup>a</sup>	M·VERA® A5003 (B0162)
Food contact approval EU 10/2011	-	√ f	√f	√f
Certificates	-	OK compost INDUSTRIAL	Biodegradable in Soil	OK compost INDUSTRIAL <sup>e</sup>
Biobased carbon content <sup>c</sup>	%	n.a.	n.a.	n.a.
Transparency	-	opaque	opaque	opaque
Density	g/cm³	1.40	1.26	1.33
MVR (190 °C/2.16 kg)	cm³/10 min	2–5	2–5	2–5
Tensile modulus <sup>d</sup>	MPa	380/170	300/190	320/155
Tensile strength <sup>d</sup>	MPa	25/30	23/23	30/40
Elongation at break <sup>d</sup>	%	410/470	420/470	450/455
Tear strength (ISO 6383)	N/mm	100/50	100/120	105/33

<sup>&</sup>lt;sup>a</sup> product in development, preliminary data <sup>c</sup> ISO 16620; TC <sup>d</sup> according ISO 527-3 <sup>e</sup> certification possible <sup>f</sup> available on request n.a. = not applicable

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