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

	Unit	M·VERA® B5018	M·VERA® B5019	M·VERA® 85027	M·VERA® B5029	M·VERA® 85033	M·VERA® B5037	M·VERA® B5039
		(B0280)	(B0041)	(B0279)	(B0155)	(B0267)	(B0183)	(B0186)
Food contact approval EU 10/2011	-	√ <sup>f</sup>	√ f	√ f	√ f	√f	√ f	√ f
Certificates	-	OK compost INDUSTRIAL	OK compost INDUSTRIAL	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.	n.a.	n.a.	>50	n.a.	n.a.
Transparency	-	opaque	translucent	opaque	opaque	opaque	opaque	opaque
Density	g/cm³	1.4	1.23	1.5	1.41	1.30	1.51	1.45
MVR (190 °C/2.16 kg)	cm <sup>3</sup> /10 min	2–5	2–5	2–5	2–5	1–5	1–5	1–5
Tensile modulus <sup>d</sup>	MPa	240/150	1,150/470	240/165	380/175	250/150	175/160	150/145
Tensile strength <sup>d</sup>	MPa	21/21	21/30	19/20	25/30	19/20	22/22	30/31
Elongation at break <sup>d</sup>	%	330/410	210/350	340/460	410/480	350/550	505/510	525/550
Tear strength (ISO 6383)	N/mm	73/68	12/20	85/50	105/48	200/250	150/170	105/145

\* 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 <sup>f</sup> available 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®, 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.



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## M-VERA® product portfolio Film extrusion

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

	Unit	M·VERA® A5001 (B0090)	M·VERA® A5002 (B0141)ª	M·VERA® A5003 (B0162)
Food contact approval EU 10/2011	-	√ <sup>f</sup>	√ f	√ <sup>f</sup>
Certificates	-	OK compost INDUSTRIAL	Biodegradable in Soil	OK compost INDUSTRIAL <sup>e</sup>
<b>Biobased carbon content</b> <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)	cm <sup>3</sup> /10 min	2–5	2–5	2–5
Tensile modulus <sup>d</sup>	MPa	380/170	310/170	320/155
Tensile strength <sup>d</sup>	MPa	25/30	26/35	30/40
Elongation at break <sup>d</sup>	%	410/470	390/540	450/455
Tear strength (ISO 6383)	N/mm	100/50	150/70	105/33

<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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