

Typical Properties of M·VERA® Biocompounds for Extrusion and Thermoforming

	Unit	M·VERA® GP4001 (B0148) ^a	M·VERA® GP4003 (B0219) ^a	M·VERA® GP4004 (B0165)	M·VERA® GP4005 (B0242) ^a	M·VERA® GP4006 (B0241) ^a
Food contact approval EU 10/2011	-	√ ^f	√ ^f	√ ^f	√ ^f	√ ^f
Certificates	-	OK compost INDUSTRIAL	OK compost INDUSTRIAL	OK compost INDUSTRIAL ⁱ	OK compost INDUSTRIAL	OK compost INDUSTRIAL ⁱ
Renewable content in the polymer	%	~70	~50	n.a.	~100	~80
Density	g/cm ³	1.40	1.32	1.41	1.25	1.25
MVR (190 °C/2.16 kg)	cm ³ /10 min	2–5	2–5	2–5	2–8	2–5
Tensile modulus ^c	MPa	2,650	1,850	370/185 ^e	2,150	1,800
Tensile strength ^c	MPa	34	25	27/28 ^e	34	32
Tensile stress ^c	MPa	34	25	-	32	32
Elongation at yield ^c	%	3.1	2.5	-	2.8	3.4
Elongation at break ^c	%	30	25	400/460 ^e	9	40
Dart-drop Impact Test ^d Force _{max} @ 23 °C	N	1,030	1,080	-	72	840
Dart-drop Impact Test ^d Energy _{max} @ 23 °C	J	3.7	6.3	-	0.15	2.2
Dart-drop Impact Test ^d Deformation _{max} @ 23 °C	mm	7.6	10.9	-	4.5	6.2
Dart-drop Impact Test ^d Force _{max} @ 4 °C	N	1,070	1,560	-	65	1,223
Dart-drop Impact Test ^d Energy _{max} @ 4 °C	J	2.7	8.4	-	0.11	3.2
Dart-drop Impact Test ^d Deformation _{max} @ 4 °C	mm	5.7	8.4	-	0.9	6.3

^a product in development, preliminary data ^b certification in progress ^c ISO 527-3; determined in MD on 0.8 mm thick test specimens ^d ISO 6603-2 (4,4 m/s) ^e in MD/TD; (MD) = Machine direction; (TD) = Transversal direction ^f available on request ⁱ certification possible
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 and to be protected against direct sun. For keeping the product properties, the temperature must not exceed 50 °C at any time during transport and storage. Furthermore, the storage time must not exceed 6 months at room temperature (23 °C). Products made of M·VERA® grades have to 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
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

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.

09/2021

