

Typical properties of biodegradable M-VERA® injection moulding compounds

	Unit	M-VERA® GP1005 (B0001) ^a	M-VERA® GP1012 (B0254) ^a	M-VERA® GP1015 (B0071)	M-VERA® GP1018 (B0085) ^a	M-VERA® GP1025 (B0147) ^a	M-VERA® GP1028 (B0249) ^a	M-VERA® GP1039 (B0206)	M-VERA® GP1045 (B0217)
Food contact approval EU 10/2011	-	√ ^{kc}	√ ^{kc}	√ ^c	√ ^c	√ ^c	√ ^c	-	√ ^{kc}
Certificates	-	-	OK biodegradable SOIL; OK compost HOME	OK compost INDUSTRIAL	OK compost INDUSTRIAL	OK compost INDUSTRIAL	OK compost INDUSTRIAL ^b	OK compost INDUSTRIAL ⁱ	OK biodegradable SOIL; OK compost HOME
Renewable content in the polymer	%	~50	~100	~70	~100	~100	~50	~50	~100
Density	g/cm ³	1.44	1.22	1.44	1.28	1.49	1.31	1.53	1.20
MVR (190 °C/2.16 kg)	cm ³ /10 min	12	9 ^e	10	12	11	19	13	9 ^e
Tensile modulus^f	MPa	1,190	1,750	4,100	4,500	8,480	2,800	4,700	1,500
Tensile strength^f	MPa	26	25	40	47	65	42	35	26
Yield strength^f	MPa	26	25	41	47	n.d.	42	35	26
Elongation at yield^f	%	7	3.7	2	1.3	n.d.	2.5	1.8	3
Elongation at break^f	%	20	4	4.7	1.3	1.3	20	2.1	5.5
Charpy notched impact strength^g	kJ/m ²	3.2	2.2	3.5	1.8	2	8	2	2
Charpy impact strength^l	kJ/m ²	46	12	50	9.3	19	180	17.5	14
HDT/B (ISO 75/B)	°C	95	104	50–115 ^h	50–115 ^h	50–115 ^h	50–80 ^h	50–115 ^h	98
Flammability (ISO 3795/DIN 75200)	mm/min	-	-	-	-	-	-	0	-

^a product in development, preliminary data ^b certification in progress ^c available on request ^e (160/5) ^f according ISO 527-1/-2 ^g ISO 179-1/1eA ^l ISO 179-1/1eU ^h depending on mould temperature and annealing process afterwards ⁱ certification possible
^k food contact limitations, for more informations please contact BIO-FED n.d. = not determined

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® and AF-Eco® are registered brands of AKRO-PLASTIC GmbH.

