M·VERA® ECS1001 (B4218)

Preliminary Technical Description

Product Description

M·VERA® ECS1001 (B4218): Partially biobased injection moulding grade based on Polyamide 6.10

Applications:	Technical parts, food containers, etc.
Suitable for:	Injection moulding parts
Reinforcement:	no
Food contact approval:	Yes, EU 10/2011

Properties*

	Standard	Unit	ECS1001 (B4218)
Melting point	-	°C	220
Density	ISO 1183	g/cm³	1.08
Moisture**	-	%	<0.1
Renewable content	-	%	~60
Tensile modulus	ISO 527-1/-2	MPa	2,400
Tensile strength	ISO 527-1/-2	MPa	70
Elongation at break	ISO 527-1/-2	%	> 50
Charpy impact strength	ISO 179-1/1eU	kJ/m²	no break
Charpy notched impact strength	ISO 179-1/1eA	kJ/m²	4.5
Heat distortion temperature, HDT/A	ISO 75/A	°C	57
Heat distortion temperature, HDT/B	ISO 75/B	°C	150
Flammability acc. UL94 (0.8 mm)	UL94	Class	HB

** before packaging

***Remark:** The aforementioned information 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 light not longer than 3 months. For keeping product properties, the recommended maximum temperature of 30 °C and the maximum humidity of 50 % shall not be exceeded. Products made of M·VERA® grades have to be stored under same conditions. All M·VERA® products can be colored with AF-Eco® biomasterbatches 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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Processing Guide

Processing Recommendations

Safety Precautions:
- Processing at a temperature not higher than 330 °C
- Processing with adequate ventilation

Handling:
- Delivered with ready-to-use moisture content
- 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 25 kg foil-aluminum bags or 1 ton octabin with PE-inliner
- To be stored in dry place, protected from heat and direct sun radiation

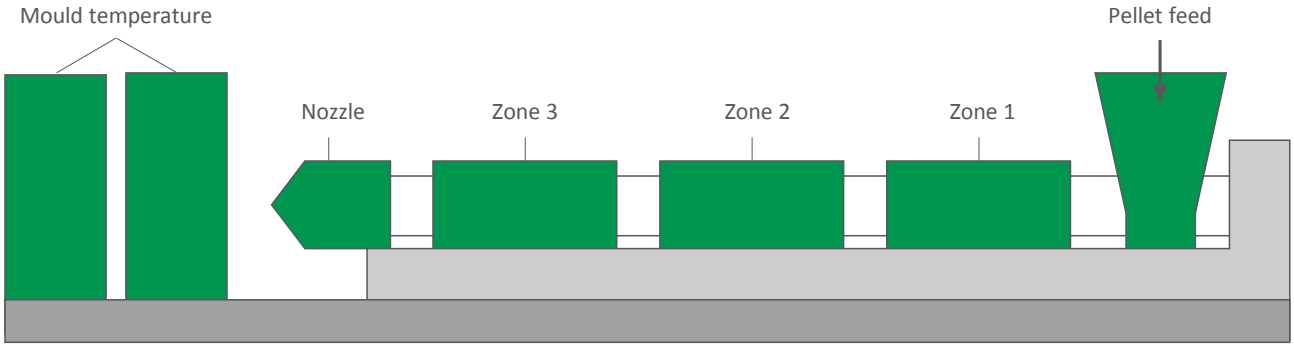
Start-up:
- Purge with polyolefin with MFR = 30 g/10 min for ~10 minutes
- Increase the temperature to recommended settings
- Start transition, when the temperature are within 10 °C of desired range

Equipment:
- M·VERA® grades are designed for standard 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.
- For a longer period, please purge with same polyolefin from start-up procedure

Processing Temperatures

Grade	Mould Temp.	Nozzle	Zone 3	Zone 2	Zone 1
ECS1001 (B4218)	75–100 °C	240–295 °C	220–300 °C	220–300 °C	220–300 °C



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