M·VERA® A5002 (B0281)
Preliminary technical description

Product description

M·VERA® A5002 (B0281):	Biodegradable polyester compound for film extrusion
Applications:	Agriculture films
Suitable for:	Mono- and multilayer films
Recommended thickness range:	20–50 µm
Certification:	BIODEGRADABLE IN SOIL (EN 17033, certified by DIN CERTCO)

Properties

	Standard	Unit	**A5002** (B0281)
MVR (190 °C/2.16 kg)	ISO 1133	cm^3/10 min	3–5
Density	ISO 1183	g/cm^3	1.25
Tensile modulus (MD)	ISO 527-3	MPa	300
Tensile modulus (TD)	ISO 527-3	MPa	190
Tensile strength (MD)	ISO 527-3	MPa	23
Tensile strength (TD)	ISO 527-3	MPa	23
Elongation at break (MD)	ISO 527-3	%	420
Elongation at break (TD)	ISO 527-3	%	470
Tear strength (MD)	ISO 6383	N/mm	100
Tear strength (TD)	ISO 6383	N/mm	120

(MD) = Machine direction; (TD) = Transversal direction

Remark: The mechanical values above were determined on 25 µm M·VERA® A5002 (B0281) blown film samples, processed at 145 °C with a BUR of 1:3, according to ISO 527. Please note, that the given numbers above are typical values and not to be construed as specification.

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GREEN COMPOUNDS

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Preliminary processing guide

Processing recommendations

Safety precautions:
- Processing at a melt temperature not higher than 165 °C
- Process with adequate room ventilation
- Smoke may occur when melt temperature is high (e.g. due to glycerine content) - lower melt temperature will lead to reduced smoke generation

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:
- Recommended humidity below 0.2 %
- 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 1 ton Bigbags with PE-Inliner
- To be stored in dry place, protected from heat and direct sun radiation

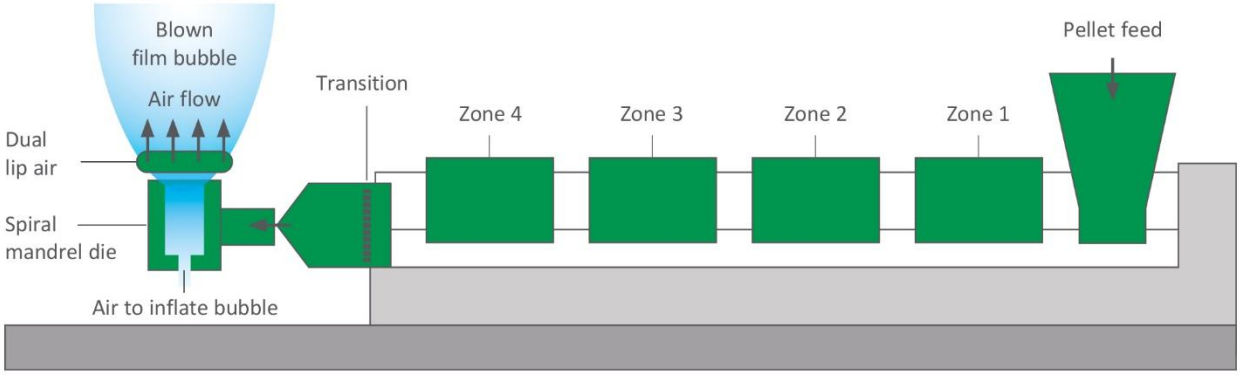
Start-up:
- Purge with polyolefin with MFR = 4-7 g/10 min for ~10 minutes
- Lower the temperature to recommended settings
- Start transition while purging when the temperatures are within 10 °C of desired range

Equipment:
- Designed for standard extrusion lines
- Die gap: 0.5–1.6 mm
- Dual-lip air ring recommended, also IBC if possible
- Chilled air supply leads to more stable bubble on higher output rates

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	Die	Transition	Zone 4	Zone 3	Zone 2	Zone 1
A5002 (B0281)	150–160 °C	150–160 °C	150–160 °C	145–155 °C	140–150 °C	140–150 °C



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