

# MedEco ICB C2

## Technical Data Sheet

MedEco ICB C2 is a 100% bio-based PLA-based material for injection molding. It has high stiffness and surface hardness. ICB C2 is characterized by its crystal-clear, color-neutral transparency and is used in surgical instruments, drug delivery devices, and well plates.

### Material properties

All values given are indicative. The data was measured on test objects and may vary due to product-specific geometry and process characteristics.

Properties	Method	Condition	Value	Unit
Density	ISO 1183		1.23	g/cm <sup>3</sup>
MFR	ISO 1133-A	190°C/ 2.16 kg	40	g/10min
Melting temperature	ISO 11357		175	°C
Tensile strength	ISO 527-1/1A		65	N/mm <sup>2</sup>
Elongation at break	ISO 527-1/1A		4.5	%
Young's modulus	ISO 527-1/1A		3450	N/mm <sup>2</sup>
Charpy Impact Strength unnotched	ISO 179/1eU	23°C	20	kJ/m <sup>2</sup>
Charpy Impact Strength notched	ISO 179/1eA	23°C	2.4	kJ/m <sup>2</sup>
HDT-B	ISO 75-1	0.45 N/mm <sup>2</sup>	56	°C
Water absorption	ISO 62	23°C, H <sub>2</sub> O, 24 h	0.6	%

### Processing instructions

Pre-drying: at least 6 h at 50°C

Parameter	min	max	Initial value	Unit
Periphery Temperature	15	50	25	°C
Feed Zone Temperature	140	190	170	°C
Compression Zone Temperature	180	210	180	°C
Metering Zone Temperature	180	220	190	°C
Nozzle Temperature	180	220	190	°C
Mold Temperature	10	55	40	°C
Melt Temperature	190	210	195	°C