ABS MEDICAL PELLET

TECHNICAL DATA SHEET VERSION 1.1 DATE: 24/02/2023

ABS MEDICAL

Pellets of excellent quality specially designed for the field of medicine. Its UPS Class VI or ISO 10993-1 certifications ensure the biocompatibility of the material with the human body.

In terms of technical characteristics, they are very similar to normal ABS.



	VALUES	UNIT OF MEASUREMENT	STANDARD
PHYSICAL PROPERTIES			
Chemical composition	Acrylonitrile-butadiene-styrene		
Density	1,05	g/cm^3	ISO 1183
Fluency index (220˚C/10 kg)	19	cm^3/10 min	ISO 1133
MECHANICAL PROPERTIES			
Tensile strength (until breakage, 23˚C)	50,5	MPa	ISO 527
Traction module	2550	MPa	ISO 527
Elongation at break	20	%	ISO 527
Flexion strength	75	MPa	ISO 178
Charpy Impact Force (notch, 23˚C)	124	kJ/m^2	ISO 179
THERMAL PROPERTIES			
Thermal deflection temperature (0,45 MPa)	98	˚C	ISO 75
Resistance temperature Vicat B	101	˚C	ISO 306

PROCESSING RECOMMENDATIONS [1]

Pre-drying	2 – 4 hours at 80˚C
Input to feed	20 – 40˚C
Fade zone	180 – 200˚C
Mixing zone	210 – 220˚C
Nozzle or outlet	200 – 230˚C

1 (typical values, depending on the equipment need to be optimized)

SIZE	NET WEIGHT	GROSS WEIGHT	COLOR	PACKAGING
S	1 kg	1,1 kg	Natural	SmartBag, security seal.
M	5 kg	5,2 kg	Natural	PA bag, small cardboard box.
L	15 kg	15,5 kg	Natural	PA bag, large cardboard box.

NOTICE: The information provided in the data sheets is intended for reference only. It should not be used as design or quality control values. Actual values may differ significantly depending on printing conditions. The final performance of printed components not only depends on materials, design and printing conditions are also important.