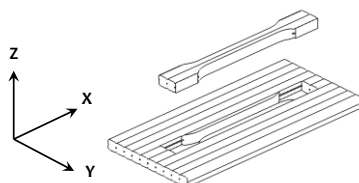


ASA C – Data sheet

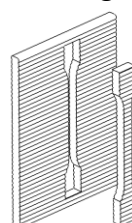
It is a composite material of Acrylonitrile Styrene Acrylate (ASA) and cork. It is specially formulated to be used in 3D printing equipment fed by polymeric pellets, with excellent outdoor properties. Its usefulness has been demonstrated for products made by additive manufacturing (FGF: Fused Granulated Fabrication) and injection molding.

ASSESSED PROPERTIES	VALUE	UNITS	NORMATIVE
MECHANICAL			
Ultimate tensile strength			
Injection	40	MPa	ISO 527
X (taken from horizontal plates)	35	MPa	ISO 527 adapted
Z (Taken from vertical plates)	23	MPa	ISO 527 adapted
Young's modulus			
Injection	2100	MPa	ISO 527
X (taken from horizontal plates)	1800	MPa	ISO 527 adapted
Z (Taken from vertical plates)	1500	MPa	ISO 527 adapted
Elongation at fracture			
Injection	30.10	%	ISO 527
X (taken from horizontal plates)	28.60	%	ISO 527 adapted
Z (Taken from vertical plates)	19.60	%	ISO 527 adapted
THERMAL / ELECTRICAL			
Volumetric electrical conductivity	-	S·cm ⁻¹	ASTM D257
Thermal conductivity	-	W/m·K	ASTM E1530
Vicat softening temperature	93	°C	ISO 306
HDT softening temperature	76	°C	ISO 75
MELT FLOW INDEX			
Melt Flow Index	26.67		
INDICTED			
Dehumidified			
Dehumidification time	4	h	
Dehumidification temperature	80	°C	
Extrusion			
Zone 1 temperature	230	°C	
Zone 2 temperature	240	°C	
Zone 3 temperature (nozzle)	240	°C	
Bed Temperature	100-120	°C	

This material has been tested in an FGF equipment, considering the following guidelines to evaluate its mechanical properties:



Orientación X



Orientación Z