

Styrol-Acrylnitril (SAN)

General

SAN is a copolymer of styrene and acrylonitrile, which has very similar properties to PS. However, the properties of SAN are clearly superior to those of PS in some areas. The SAN has significantly higher strength, higher thermal resistance, higher scratch resistance and better chemical resistance.

SAN is not suitable for snap connections and should only be screwed.

Styrene acrylonitrile is dishwasher safe and meets the composition requirements of the European Regulation No. 10/2011 on plastic materials for food contact.

SAN is not suitable for outdoor applications. The material is only partially resistant to UV rays. SAN is rather brittle and should not be used for applications where high impact strength is required. HIPS or ABS are better suited for such applications.

advantage

- Dishwasher safe
- High scratch resistance
- Good chemical resistance
- Transparency

disadvantage

- Not suitable for snap connections
- brittle

Processing data

Printing temperature

230-260 °C

Heated bed temperature

90-110 °C

Drying temperature

80°C

Drying time

4-6h

Technical specifications

Shrinkage (ISO 294-4)	0.3-0.7	%
MFR	21	g/10min
Yield stress (ISO 527-1,2)	72	MPa
Elongation at yield (ISO 527-1,2)	-	%
Elongation at break (ISO 527-1,2)	-	%
Tensile modulus (ISO 527-1)	3800	MPa
Heat deflection temperature 1.8 MPa (ISO 75-2)	101	°C
Vicat softening temperature A (ISO 306/A120)	110	°C
Thermal conductivity 23°C	-	W/(K*m)
Flammability (IEC 60695-11-10)	HB	
Density (ISO 1183)	1.08	g/cm ³