

SABIC® PA6 S27

POLYAMIDE 6

DESCRIPTION

SABIC® PA S27 is a general purpose polyamide 6 resin of low viscosity.

This product is not intended for and must not be used in any pharmaceutical/medical applications.

TYPICAL APPLICATIONS

Engineering Plastics Compounds, high tenacity filament, paper coating.

TYPICAL PROPERTY VALUES

PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
PHYSICAL PROPERTIES			
Water absorption (23°C-sat)	11.1	%	ISO 62
Water Content			
Water content	<0.06	% w/w	ASTM D6869
Extractable Content			
Extractable Content	<0.6	% w/w	SABIC method
PROPERTIES			
Viscosity			
Relative Viscosity	2.7	-	ISO 307
POLYMER PROPERTIES			
Density			
Density	1.12	g/cm ³	ASTM D792
MECHANICAL PROPERTIES			
Rockwell Hardness			
R scale	119	-	ASTM D785
Tensile strength			
@ Yield	82	MPa	ASTM D638
Tensile Elongation			
@ Yield	4	%	ASTM D638
@ Break	16	%	ASTM D638
Tensile modulus			
Tensile modulus	2650	MPa	ASTM D638
Flexural strength			
Flexural strength	107	MPa	ASTM D790
Flexural Modulus			
Flexural Modulus	2650	MPa	ASTM D790
Izod Impact Strength			
Notched, 23°C	5	kJ/m ²	ASTM D256
THERMAL PROPERTIES			
Heat deflection temperature			
@ 1.80 MPa	58	°C	ASTM D648

PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
Melting Temperature			
Melting Temperature	219	°C	ASTM D3418

PROCESSING CONDITIONS

Extrusion Temperature: 240°C-300°C

STORAGE AND HANDLING

Polyamide resin should be stored in a manner to prevent a direct exposure to sunlight and/or heat. The storage area should also be dry and preferably do not exceed 50°C. SABIC would not give warranty to bad storage conditions which may lead to quality deterioration such as color change, bad smell and inadequate product performance. It is advisable to process Polyamide resin within 6 months after delivery. In case material picks up moisture, customer is strongly advised to dry the resin prior to use. sd