

PRODUCT SPECIFICATIONS



TUFNYL[®]	Resin Type: Polyamide 6
SB30W1XXXBLACK*	<p>Common Features of Tufnyl[®] Polyamide resin include excellent mechanical and physical properties such as high mechanical strength, excellent balance of stiffness and toughness, good high temperature performance, good electrical properties, abrasion and chemical resistance.</p> <p>Polyamide 6 30% glass fiber reinforced, heat resistant, hydrolysis resistant material in black for injection molding applications.</p>

Property	Unit	Testing Method	Typical Data (DAM)
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MECHANICAL PROPERTIES

Tensile strength @ break	MPa	ISO 527	165
Elongation @ break	%	ISO 527	3.5
Flexural modulus	MPa	ISO 178	8500
Flexural strength	MPa	ISO 178	250
Rockwell hardness	R- Scale	ISO 2039-2	115
Izod notched impact strength (+23 C)	KJ/m ²	ISO 180	12

THERMAL PROPERTIES

Heat deflection temp. @ 1.82 Mpa load	°C	ISO 75	200
Melting Point	°C	ISO 11357	220

BURNING BEHAVIOUR

Flammability	class	UL 94	HB
Thickness tested	mm		3

PHYSICAL PROPERTIES

Density	kg/m ³	ISO 1183	1360
Moisture content	%	DSM	0.20 MAX
Filler content	%	DSM	30

PROCESSING GUIDELINES

Parameter	Unit	Typical Data
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PRE-DRYING SETTINGS

Pre-Drying Temperature	°C	Vacuum/Air Circulated Ovens at 100/80
Pre-Drying Time	Hours	2-4 hrs

It is recommended to pre-dry the material granules in vacuum / air circulated ovens using perforated trays.

INJECTION MOLDING SETTINGS

Mold Temperature	°C	80-100
Nozzle Temperature	°C	265-275
Melting Zone Temperature	°C	270-285
Compression Zone Temperature	°C	270-285
Feed Zone Temperature	°C	240-250

**Development grade, yet to be commercialized. Hence the properties reported here may be revised without notice.

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