

TECHNYL STAR® S 218L2 V30 BK

DOMO Engineering Plastics - Polyamide 6

General Information

Product Description

TECHNYL STAR S 218L2 V30 BK is based on a patented high flow polyamide 6 resin (TechnylStar), heat stabilized, UV stabilized, reinforced with 30% of glass fibre, for injection moulding. Due to its outstanding flow characteristics, this grade provides a significant productivity improvement and allows more freedom in mould and part design versus a standard polyamide solutions. For America availability only.

General

Material Status	• Commercial: Active
Availability	• Latin America • North America
Filler / Reinforcement	• Glass Fiber, 30% Filler by Weight
Additive	• Heat Stabilizer • UV Stabilizer
Features	• Heat Aging Resistant • Heat Stabilized • UV Stabilized
Agency Ratings	• EC 1907/2006 (REACH)
RoHS Compliance	• RoHS Compliant
Processing Method	• Injection Molding
ISO Designation (ISO 16396)	• PA6,GF30,MHL2,S14-100
Resin ID (ISO 1043)	• PA6-GF30

 Properties ¹

Physical	Dry	Conditioned	Unit	Test Method
Density	1.39	--	g/cm ³	ISO 1183
Molding Shrinkage				ISO 294-4
Across Flow	0.60 to 0.80	--	%	
Flow	0.10 to 0.30	--	%	
Water Absorption (24 hr, 73°F)	0.95	--	%	ISO 62
Mechanical	Dry	Conditioned	Unit	Test Method
Tensile Modulus	1.57E+6	856000	psi	ISO 527-1
Tensile Stress (Break)	27600	16000	psi	ISO 527-2
Tensile Strain (Break)	3.0	8.5	%	ISO 527-2
Flexural Modulus	1.33E+6	812000	psi	ISO 178
Flexural Stress	40600	23200	psi	ISO 178
Impact	Dry	Conditioned	Unit	Test Method
Charpy Notched Impact Strength (73°F)	5.9	12	ft-lb/in ²	ISO 179/1eA
Charpy Unnotched Impact Strength (73°F)	45	46	ft-lb/in ²	ISO 179/1eU
Thermal	Dry	Conditioned	Unit	Test Method
Deflection Temperature Under Load (66 psi, Unannealed)	428	--	°F	ISO 75-2/B
Deflection Temperature Under Load (264 psi, Unannealed)	410	--	°F	ISO 75-2/A
Melting Temperature ²	430	--	°F	ISO 11357-3
Flammability	Dry	Conditioned	Unit	Test Method
Burning Rate (0.0394 in)	< 3.9	--	in/min	FMVSS 302

Processing Information

Injection	Dry Unit
Drying Temperature	167 to 185 °F
Drying Time	2.0 to 4.0 hr
Dew Point	< -22 °F
Suggested Max Moisture	0.20 %
Rear Temperature	446 to 455 °F
Middle Temperature	455 to 464 °F



Front Temperature	464 to 473 °F
Mold Temperature	140 to 194 °F

Injection Notes

The material is supplied in airtight bags, ready for use. In case that the virgin material has absorbed moisture, it must be dried with a dehumidified air drying equipment, dew point minimum -20°C. Recommended time 2-4h.

Notes

¹ Typical properties: these are not to be construed as specifications.

² 10°C/min

