

TECHNYL® A 238 BK 21N

DOMO Engineering Plastics - Polyamide 66

General Information

Product Description

TECHNYL A 238 BK 21N is an unfilled polyamide 6.6, heat stabilized, impact modified, for injection moulding. This grade offers excellent combination between rigidity and impact resistance at ambient temperature.

General

Material Status	• Commercial: Active		
Availability	• Africa & Middle East • Asia Pacific	• Europe • Latin America	• North America
Additive	• Heat Stabilizer		
Features	• Heat Aging Resistant	• Heat Stabilized	• High Impact Resistance
Uses	• Automotive Applications • Connectors	• Consumer Applications • Industrial Applications	• Sporting Goods
Agency Ratings	• EC 1907/2006 (REACH)		
RoHS Compliance	• RoHS Compliant		
Processing Method	• Injection Molding		
ISO Designation (ISO 16396)	• PA66,MP,S14-030		
Resin ID (ISO 1043)	• PA66		

Properties ¹

Physical	Dry	Conditioned	Unit	Test Method
Density	1.10	--	g/cm ³	ISO 1183
Molding Shrinkage				ISO 294-4
Across Flow	1.7	--	%	
Flow	1.9	--	%	
Water Absorption (24 hr, 73°F)	1.1	--	%	ISO 62
Water Absorption (Equilibrium, 73°F, 50% RH)	2.9	--	%	ISO 62
Mechanical	Dry	Conditioned	Unit	Test Method
Tensile Modulus	392000	174000	psi	ISO 527-1
Tensile Stress (Yield)	10200	--	psi	ISO 527-2
Tensile Stress (Break)	7250	5800	psi	ISO 527-2
Tensile Strain (Break)	25	100	%	ISO 527-2
Flexural Modulus	326000	174000	psi	ISO 178
Flexural Stress	13800	6530	psi	ISO 178
Impact	Dry	Conditioned	Unit	Test Method
Charpy Notched Impact Strength (73°F)	3.8	9.5	ft·lb/in ²	ISO 179/1eA
Notched Izod Impact Strength (73°F)	3.8	7.6	ft·lb/in ²	ISO 180/1A
Thermal	Dry	Conditioned	Unit	Test Method
Deflection Temperature Under Load (66 psi, Unannealed)	356	--	°F	ISO 75-2/B
Deflection Temperature Under Load (264 psi, Unannealed)	158	--	°F	ISO 75-2/A
Melting Temperature ²	505	--	°F	ISO 11357-3
Electrical	Dry	Conditioned	Unit	Test Method
Surface Resistivity	1.0E+14	--	ohms	IEC 62631-3-2
Volume Resistivity	1.0E+13	--	ohms·m	IEC 62631-3-1
Electric Strength	560	--	V/mil	IEC 60243-1
Flammability	Dry	Conditioned	Unit	Test Method
Burning Rate (0.0394 in)	< 3.9	--	in/min	FMVSS 302
Flame Rating (0.06 in)	HB	--		UL 94

Processing Information



Injection	Dry Unit
Drying Temperature	176 °F
Suggested Max Moisture	0.20 %
Rear Temperature	509 to 527 °F
Middle Temperature	518 to 536 °F
Front Temperature	536 to 545 °F
Mold Temperature	140 to 176 °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

