

DOMONYL® 1820RMC40U3 BK-4M-Z

DOMO Engineering Plastics - Polyamide 6

General Information

Product Description

Polyamide 6, 40% glass fiber and mineral filler, UV resistant, for injection moulding. For America availability only.

General

Material Status	• Commercial: Active
Availability	• Latin America • North America
Filler / Reinforcement	• Glass Fiber\Mineral, 40% Filler by Weight
Features	• Good Weather Resistance
Agency Ratings	• EC 1907/2006 (REACH)
RoHS Compliance	• RoHS Compliant
Processing Method	• Injection Molding
ISO Designation (ISO 16396)	• PA6,(GF+MD)40,MHL1,S14-100
Resin ID (ISO 1043)	• PA6-(GF+MD)40

Properties ¹

Physical	Dry	Conditioned	Unit	Test Method
Density	1.45	--	g/cm ³	ISO 1183
Molding Shrinkage				ISO 294-4
Across Flow	0.60 to 0.80	--	%	
Flow	0.10 to 0.30	--	%	
Mechanical	Dry	Conditioned	Unit	Test Method
Tensile Modulus	1.60E+6	827000	psi	ISO 527-1
Tensile Stress (Yield)	0.00	10300	psi	ISO 527-2
Tensile Stress (Break)	18900	10200	psi	ISO 527-2
Tensile Strain (Yield)	0.0	4.7	%	ISO 527-2
Tensile Strain (Break)	2.0	6.0	%	ISO 527-2
Flexural Modulus	1.45E+6	--	psi	ISO 178
Flexural Stress	29000	--	psi	ISO 178
Impact	Dry	Conditioned	Unit	Test Method
Charpy Notched Impact Strength (73°F)	2.9	5.2	ft·lb/in ²	ISO 179/1eA
Charpy Unnotched Impact Strength (73°F)	21	24	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	432	--	°F	ISO 11357-3

Processing Information

Injection	Dry Unit
Drying Temperature	176 °F
Suggested Max Moisture	0.20 %

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.

