

DOMONYL® 1820R35H BK-1

DOMO Engineering Plastics - Polyamide 6

General Information

Product Description

DOMONYL 1820R35H BK-1 is a polyamide 6, reinforced with 35% of glass fibre, heat stabilized, for injection moulding. For America availability only.

General

Material Status	• Commercial: Active
Availability	• Latin America • North America
Filler / Reinforcement	• Glass Fiber, 35% Filler by Weight
Additive	• Heat Stabilizer
Features	• Heat Aging Resistant • Heat Stabilized
Agency Ratings	• EC 1907/2006 (REACH)
RoHS Compliance	• RoHS Compliant
Processing Method	• Injection Molding
ISO Designation (ISO 16396)	• PA6,GF35,MH,S14-100
Resin ID (ISO 1043)	• PA6-GF35

Properties ¹

Physical	Dry	Conditioned	Unit	Test Method
Density	1.42	--	g/cm ³	ISO 1183
Molding Shrinkage				ISO 294-4
Across Flow	0.70 to 0.80	--	%	
Flow	0.10 to 0.30	--	%	
Mechanical	Dry	Conditioned	Unit	Test Method
Tensile Modulus	1.74E+6	856000	psi	ISO 527-1
Tensile Stress (Yield)	--	13100	psi	ISO 527-2
Tensile Stress (Break)	23200	12900	psi	ISO 527-2
Tensile Strain (Yield)	--	5.1	%	ISO 527-2
Tensile Strain (Break)	2.3	6.4	%	ISO 527-2
Flexural Modulus	1.45E+6	--	psi	ISO 178
Flexural Stress	34800	--	psi	ISO 178
Impact	Dry	Conditioned	Unit	Test Method
Charpy Notched Impact Strength (73°F)	3.8	8.6	ft·lb/in ²	ISO 179/1eA
Charpy Unnotched Impact Strength (73°F)	27	37	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)	428	--	°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 %

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.

