

ReDefyne™ IAI2H BK0858

Ascend Performance Materials Operations LLC - Polyamide 66

General Information

Product Description

ReDefyne IAI2H BK0858 is a 100% pre-consumer recycled polymer, medium impact modified, heat stabilized PA66. This product balances strength, ductility and thermal resistance making it an excellent choice for automotive fastener applications.

General

Material Status	• Commercial: Active		
Availability	• Asia Pacific	• Latin America	
	• Europe	• North America	
Additive	• Heat Stabilizer	• Impact Modifier	
Features	• Abrasion Resistant	• Good Toughness	• Low Temperature Toughness
	• Chemical Resistant	• Heat Stabilized	• Oil Resistant
	• Gasoline Resistant	• High Impact Resistance	• Solvent Resistant
	• General Purpose	• Impact Modified	
	• Good Processability	• Low Temperature Impact Resistance	
Automotive Specifications	• FORD WRS-M4D706-B2	• RENAULT UB15b	• STELLANTIS MS-DB-41 CPN1826
Appearance	• Black		
Forms	• Pellets		
Processing Method	• Injection Molding		
Resin ID	• PA66-I		

Properties ¹

Physical	Dry	Conditioned	Unit	Test Method
Density	1.10	--	g/cm ³	ISO 1183
Molding Shrinkage				ISO 294-4
Across Flow : 73°F, 0.0787 in	1.6	--	%	
Flow : 73°F, 0.0787 in	1.8	--	%	
Water Absorption (24 hr, 73°F)	1.2	--	%	ISO 62
Water Absorption (Equilibrium, 73°F, 50% RH)	2.3	--	%	ISO 62
Mechanical	Dry	Conditioned	Unit	Test Method
Tensile Modulus (73°F)	406000	247000	psi	ISO 527-1
Tensile Stress (Yield, 73°F)	8700	6530	psi	ISO 527-2
Tensile Stress (Break, 73°F)	7540	5800	psi	ISO 527-2
Tensile Strain (Break, 73°F)	22	60	%	ISO 527-2
Flexural Modulus (73°F)	334000	116000	psi	ISO 178
Flexural Stress (73°F)	10200	3480	psi	ISO 178
Impact	Dry	Conditioned	Unit	Test Method
Charpy Notched Impact Strength				ISO 179/1eA
-22°F	5.2	11	ft·lb/in ²	
73°F	7.6	30	ft·lb/in ²	
Charpy Unnotched Impact Strength				ISO 179/1eU
-22°F	No Break	No Break		
73°F	No Break	No Break		
Notched Izod Impact Strength				ISO 180/1A
-22°F	7.6	11	ft·lb/in ²	
73°F	8.6	21	ft·lb/in ²	
Thermal	Dry	Conditioned	Unit	Test Method
Deflection Temperature Under Load (66 psi, Unannealed)	365	--	°F	ISO 75-2/B
Deflection Temperature Under Load (264 psi, Unannealed)	145	--	°F	ISO 75-2/A



Melting Temperature	500	--	°F	ISO 11357-3
CLTE - Flow (73 to 131°F, 0.0787 in)	6.2E-5	--	in/in/°F	ISO 11359-2
CLTE - Transverse (73 to 131°F, 0.0787 in)	7.6E-5	--	in/in/°F	ISO 11359-2
Electrical	Dry	Conditioned	Unit	Test Method
Volume Resistivity (0.0394 in)	1.0E+11	--	ohms·cm	IEC 60093
Electric Strength (0.0394 in)	300	--	V/mil	IEC 60243-1

Processing Information

Injection	Dry	Unit
Drying Temperature	176	°F
Drying Time	4.0	hr
Rear Temperature	536 to 590	°F
Middle Temperature	536 to 590	°F
Front Temperature	536 to 590	°F
Nozzle Temperature	536 to 590	°F
Processing (Melt) Temp	545 to 581	°F
Mold Temperature	149 to 203	°F

