

ReDefyne™

Polyamide 66 (PA66) — Technical Data Sheet

ReDefyne IA12H BK0858 is a 100% pre-consumer recycled, medium impact-modified, heat-stabilized PA66. This product balances strength, ductility and thermal resistance, making it an excellent choice for automotive fastener applications.

Overview

Material Status	Commercial: Active
Available Regions	North America; Latin America; Europe; Asia-Pacific
Additives	Impact Modifier; Heat Stabilizer
Appearance	Black
Form	Pellets
Processing Method	Injection Molding
Resin ID	PA66-I

Features

Impact Modified	Low Temperature Toughness	High Impact Resistance
Solvent Resistant	Good Processability	Cold Impact Resistance
Good Chemical Resistance	Good Wear Resistance	Gasoline Resistant
Oil Resistant	Heat Stabilized	Good Toughness
General Purpose		

Physical Properties

Property	Dry	Conditioned	Unit	Test Method
Density	1.10	—	g/cm ³	ISO 1183
Shrinkage — Vertical: 23°C, 2.00 mm	1.6	—	%	ISO 294-4
Shrinkage — Flow: 23°C, 2.00 mm	1.8	—	%	ISO 294-4
Water Absorption — 24 hr, 23°C	1.2	—	%	ISO 62
Water Absorption — Equilibrium, 23°C, 50% RH	2.3	—	%	ISO 62

Mechanical Properties

Property	Dry	Conditioned	Unit	Test Method
Tensile Modulus (23°C)	2800	1700	MPa	ISO 527-1
Tensile Stress — Yield, 23°C	60.0	45.0	MPa	ISO 527-2
Tensile Stress — Break, 23°C	52.0	40.0	MPa	ISO 527-2
Tensile Strain — Break, 23°C	22	60	%	ISO 527-2
Flexural Modulus (23°C)	2300	800	MPa	ISO 178
Flexural Stress (23°C)	70.0	24.0	MPa	ISO 178



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Rabobank : 1332.51.632
Iban nummer : NL83RABO0133251632
Swift code : RABONL2U



BTW nummer : NL8235.41.216 B01



KVK nummer : 54204259



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Tevens kostenloos opvraagbaar.

ReDefyne™

Impact, Thermal and Electrical Properties

Impact Properties

Property	Dry	Conditioned	Unit	Test Method
Charpy Notched Impact Strength — -30°C	11	24	kJ/m²	ISO 179/1eA
Charpy Notched Impact Strength — 23°C	16	62	kJ/m²	ISO 179/1eA
Charpy Unnotched Impact Strength — -30°C	No Break	No Break	—	ISO 179/1eU
Charpy Unnotched Impact Strength — 23°C	No Break	No Break	—	ISO 179/1eU
Izod Notched Impact Strength — -30°C	16	24	kJ/m²	ISO 180/1A
Izod Notched Impact Strength — 23°C	18	44	kJ/m²	ISO 180/1A

Thermal Properties

Property	Dry	Conditioned	Unit	Test Method
Heat Deflection Temperature — 0.45 MPa, Unannealed	185	—	°C	ISO 75-2/B
Heat Deflection Temperature — 1.8 MPa, Unannealed	63.0	—	°C	ISO 75-2/A
Melting Temperature	260	—	°C	ISO 11357-3
Coefficient of Linear Thermal Expansion — Flow, 23 to 55°C, 2.010.1 mE-m4	—	—	cm/cm/°C	ISO 11359-2
Coefficient of Linear Thermal Expansion — Vertical, 23 to 55°C, 1 2.4.0E0-4 mm	—	—	cm/cm/°C	ISO 11359-2

Electrical Properties

Property	Dry	Conditioned	Unit	Test Method
Volume Resistivity (1.00 mm)	1.0E+11	—	ohms·cm	IEC 60093
Dielectric Strength (1.00 mm)	12	—	kV/mm	IEC 60243-1

Injection Molding

Parameter	Value	Unit
Drying Temperature	80	°C
Drying Time	4.0	hr
Rear Cylinder Temperature	280 to 310	°C
Middle Cylinder Temperature	280 to 310	°C
Front Cylinder Temperature	280 to 310	°C
Nozzle Temperature	280 to 310	°C
Processing (Melt) Temperature	285 to 305	°C
Mold Temperature	65 to 95	°C



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Notes, Contact Information and Disclaimer

Notes

Typical values: These typical values should not be interpreted as specifications.
General properties: These values should not be considered specifications.

Regional Contacts

Region	Telephone
North America	+1 888 927 2363
Europe	+32 10 608 600
Asia	+86 21 2315 0888

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