Technical Data Sheet

INVISTA U4260FL PA66 Resin

A high-flow mildly nucleated lubricated PA66 resin

INVISTA's U4260FL resin uses patented technology to provide high flow with stable molecular weight and is specially designed for unreinforced applications.

Faster crystallization while maintaining excellent impact resistance

U4260FL has been formulated with mild nucleation to provide fast and consistent crystallization in molding processes without compromising ductility and impact resistance.

High flow + enhanced crystallization = greater productivity

The excellent flow characteristics of U4260FL can allow processing temperatures to be reduced, while rapid crystallization enables faster molding cycles for greater productivity.

U4260FL provides several potential advantages for injection molders

- High flow
- Fast cycle times
- Excellent impact resistance
- Lower barrel temperatures
- Less polymer degradation
- Energy savings

	Properties (dry)	Value	Units	Method
VISCOSITY	RV in formic acid, nominal	42	—	ASTM D789
	VN at 0.5% in sulfuric acid, nominal	140	mL/g	ISO 307
	RV at 1% in sulfuric acid, nominal	2.57	—	—
PHYSICAL	Density	1.14	g/cm³	ISO 1183
	Mold Shrinkage, 2.0 mm, Parallel	1.5	%	ISO 294-4
	Mold Shrinkage, 2.0 mm, Transverse	1.5	%	ISO 294-4
	Water Absorption - 24 hours	1.8	%	ISO 62
	Water Absorption - Equilibrium @ 50% RH	2.6	%	ISO 62
MECHANICAL	Tensile Strength at Yield	85	MPa	ISO 527
	Elongation at Yield	4.2	%	ISO 527
	Elongation at Break	30	%	ISO 527
	Tensile Modulus	3150	MPa	ISO 527
	Flexural Modulus	2900	MPa	ISO 178
	Flexural Strength	95	MPa	ISO 178
	Notched Charpy at 23°C	5.3	kJ/m²	ISO 179
	Notched Charpy at -30°C	4.9	kJ/m²	ISO 179
	Unnotched Charpy at 23°C	NB	kJ/m²	ISO 179
	Unnotched Charpy at -30°C	NB	kJ/m²	ISO 179
	Notched Izod at 23°C	4.2	kJ/m²	ISO 180
THERMAL	Melting Temperature, 10°C/min	260	°C	ISO 11357
	HDT at 0.45 MPa	215	°C	ISO 75
	HDT at 1.80 MPa	66	°C	ISO 75
ELECTRICAL	Comparative Tracking Index, 3.0 mm	≥600	volts	UL 746A
	High Voltage Arc Tracking Rate	PLC 0	—	UL 746A
	Dielectric Strength, 1.0 mm	18	kV/mm	UL 746A
FLAMMABILITY	Flame Rating at 0.40 mm	V-2	—	UL 94
	Flame Rating at 0.71 mm	V-2	—	UL 94
	Flame Rating at 1.5 mm	V-2	—	UL 94
	Flame Rating at 3.0 mm	V-2	—	UL 94

Process Guidelines for Molding	
Drying temperature	80 °C
Drying time*	3 - 4 hours
Barrel temperatures	
Rear	250 - 270 °C
Middle	270 - 290 °C
Front	270 - 290 °C
Nozzle	270 - 290 °C
Processing temperature (melt)	280 - 295 °C
Mold temperature	50 - 90 °C
Back pressure**	2 - 10 bar
Vent depth	0.007 - 0.04 mm
Cushion (range)	4 - 6 mm
Suggested moisture (max)	0.20 wt%
Suggested moisture (min)	0.10 wt%
Screw speed	75 - 150 rpm

* Initial moisture below 0.25 wt%. Use dehumidified air.
** Melt pressure

General Information

Material Status

Commercial: Active

Availability

- North America
- Europe
- Asia

RoHS

No intentional additives or ingredients used in U4260FL are among those in the European directive 2011/65/EC (RoHs), as amended.

Request a Sample

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