

INOFLAR™ 1005

TECHNICAL DATA SHEET

TECHNICAL INFORMATION

INOFLAR™ 1005 is a low molecular weight granular PVDF homopolymer particularly suitable for injection molding, rotomolding and multifilament extrusion applications.

PRODUCT FEATURES

- Low viscosity
- Excellent chemical resistance
- Very good dimensional stability
- Good thermal & mechanical performance
- UV resistance
- Easy processability

TYPICAL PROPERTIES

Physical	Unit	Value	Test Method
Specific Gravity	-	1.76 – 1.79	ASTM D792
Water Absorption	%	< 0.04	ASTM D570
Rheological			
Melt Mass Flow Rate (230 °C, 3.8 Kg Load)	g/min	19 – 35	ASTM D1238
Molding Shrinkage - Flow	%	< 3	Internal Method
Mechanical			
Tensile Modulus	MPa	1800 – 2500	ASTM D638
Tensile Strength (Yield)	MPa	50 – 60	ASTM D638
Tensile Strength (Break)	MPa	30 – 50	ASTM D638
Tensile Elongation (Yield)	%	5 – 10	ASTM D638
Tensile Elongation (Break)	%	>50	ASTM D638
Taber Abrasion Resistance (1000 cycles, 1000 g, CD-10 Wheel)	mg	5 – 10	ASTM D4060
Impact			
Charpy Notched Impact Strength (23 °C)	J/m	40 – 120	ASTM D6110
Notched Izod Impact Strength (23 °C)	J/m	110	ASTM D256
Unnotched Izod Impact Strength (23 °C)	J/m	1100	ASTM D256

Hardness			
Durometer Hardness (Shore D, 1 sec, 2.00 mm)	-	73 – 80	ASTM D2240
Thermal			
Glass Transition Temperature	°C	-40	ASTM D4065
Melting Temperature	°C	165 – 172	ASTM D3418
Deflection Temperature under load (1.80 MPa)	°C	110	ASTM D648
Deflection Temperature under load (0.45 MPa)	°C	130	ASTM D648
Vicat Softening Temperature	°C	140	ASTM D1525
CLTE – Flow (0 – 40 °C)	cm/cm/°C	1.4×10^{-4}	ASTM D696
Electrical			
Volume Resistivity	Ohm-m	2×10^{12}	ASTM D257
Dielectric Strength (23 °C, 1.00 mm)	kV/mm	20 - 25	ASTM D149
Dielectric Constant (23 °C, 100 MHz – 100 Hz)	-	4.5 – 9.5	ASTM D150
Flammability			
Oxygen Index	%	44	ASTM D2863

PACKAGING

INOFLAR™ 1005 pellets are available in 25 Kg multilayered bags, packed in a polyethylene liner.

HANDLING AND STORAGE

INOFLAR™ 1005 presents no safety hazard under normal handling conditions. Please refer to the material safety data sheet to avoid potential hazards prior to processing.

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