

# **INOFLAR® 1020**



# **TECHNICAL DATA SHEET**

#### **TECHNICAL INFORMATION**

INOFLAR® 1020 is a medium molecular weight granular PVDF homopolymer suitable for extrusion, compression molding and transfer molding applications.

## **PRODUCT FEATURES**

- Medium viscosity
- Excellent chemical resistance
- Good dimensional stability
- Good thermal & mechanical performance
- UV resistance
- Easy processability

#### TYPICAL PROPERTIES

Physical Unit	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, 5 Kg Load)	g/10 min	1.5 - 3	ASTM D1238
Molding Shrinkage - Flow	%	< 3	Internal Method
Mechanical			
Tensile Modulus	MPa	1700 - 2300	ASTM D638
Tensile Strength (Yield)	MPa	45- 55	ASTM D638
Tensile Strength (Break)	MPa	35 - 55	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



Inoflar® PVDF resins are manufactured without the use of Fluoro-surfactants

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Thermal			
Glass Transition Temperature	°C	-40	ASTM D4065
Melting Temperature	°C	165 -172	ASTM D3418
Deflection Temperature under load (1.80 MPa)	°C	105	ASTM D648
Deflection Temperature under load (0.45 MPa)	°C	135	ASTM D648
Vicat Softening Temperature	°C	145	ASTM D1525
CLTE - Flow (0-40 °C)	cm/cm/°C	1.4X10 <sup>-4</sup>	ASTM D696
Electrical			
Volume Resistivity	Ohm-m	$2 \times 10^{12}$	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® 1020 pellets are available in 25 Kg multilayered bags, packed in a polyethylene liner.

## HANDLING AND STORAGE

INOFLAR® 1020 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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# SALES AND TECHNICAL SUPPORT

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