# **PVDF Z-1 Material Properties Data Sheet**

## **Product Description:**

PVDF(polyvinylidene fluoride) Z-1 is a kind of granular product with lower melting viscosity, which is applied to manufacture PVDF products by injection molding.

## **Technical Parameters:**

Project	Unit	Index	ASTM Method
Surface Appearance	/	White translucent particle	1
Relative Density	/	1.77~1.79	ASTM D792,@23/23℃
Melting Point	${\mathbb C}$	165~171	ASTM D3418,10℃/min
Melt Flow Rate	g/10min	15~25	ASTM D1238,230℃/5kg
Water Absorption,24hr	%	≤0.05	ASTM D570
Tensile Yield Strength	Мра	≥40	-ASTM D638,50mm/min@23℃
Yield Elongation	%	5∼10	
Tensile Strength at break	Мра	≥30	
Elongation at break	%	20~50	
Durometer Hardness	Shore D	70~80	ASTM D2240

#### **Product Characteristics:**

PVDF Z-1 is a melt-processible homopolymer with a recommended upper continuous-use temperature of  $150^{\circ}\text{C}(302^{\circ}\text{F})$ . The products which are made of PVDF Z-1 by suitable processing equipment possess excellent mechanical strength and toughness, stiffness, high dielectric strength, abrasion resistance, low flammability, low moisture absorption,  $\gamma$  radial and UV resistance. They cannot be corroded by acid, alkali, strong oxidizer, halogen under room temperature. And they have excellent stability for organic solvent, such as aliphatic hydrocarbon, aromatic hydrocarbon, alcohol and aldehyde, etc. The PVDF products can be continuous using within wide temperature range and can keep their properties.

## **Application Fields:**

PVDF Z-1 particles are widely used in manufacturing plastic products by injection molding, such as gaskets, pipe, fittings, valves, and pump parts, etc.

## Packaging and Store:

25 kilograms/bag

Packaging Material should put in the environment with shade and cool, avoiding insolation, high temperature, soaking, etc.