



# PVDF

## PIPING SYSTEMS

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KYNAR® PVDF



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KYNAR®



Chemical Resistant



Thermal Resistant



Weather Resistant



Fungal Resistant



High Purity



UV Resistant



Low Creep



Smooth Inner Surface



Non Toxic

KYNAR® PVDF has outstanding barrier properties, which allow better protection to the environment from leakages of hazardous chemicals. Polyvinylidene fluoride or polyvinylidene difluoride is a highly non-reactive thermoplastic fluoropolymer produced by the polymerization of vinylidene difluoride. Kynar PVDF is a polymer containing carbon, hydrogen, and fluorine. Fluorine being the giant molecule, ensures the stability of the polymer chain. PVDF is considered to be one of the most inert substances on earth.

PVDF has the advantage of absolute suppression of corrosion, even under varying process conditions, compared to other materials. KYNAR® PVDF has the characteristic properties of high resistance to chemical attack intrinsic to all fluoropolymers based on the very high strength of the carbon-fluorine molecular bonding.

### Technical Information

			PVDF Standard	PVDF Flex
Specific gravity (p)	ISO 1183	g/cm <sup>3</sup>	1.78	1.78
Max. Permissible service temp		°C	-30 to 140	-30 to 140
Tensile strength at yield (σS)	ISO 527	Mpa	50	35
Elongation at break (εR)	ISO 527	%	≥50	≥50
Flexural strength (σB 3,5%)	ISO 178	Mpa	80	80
Modulus of elasticity (Et)	ISO 527	Mpa	2000	1000
Coef. of linear therm. expansion (α)	DIN 53752	K <sup>-1</sup> X 10 <sup>-4</sup>	1.2	1.5
Volume resistivity (ρD)	VDE 0303	Ω.X cm	≥10 <sup>13</sup>	≥10 <sup>13</sup>

### PIPING



**PVDF Natural**

Range : 20 - 200 mm  
PN 10 to PN 16  
Standards : ISO 10931  
ASTM Sch 40/80



**PVDF Red**

Range : 20 - 200 mm  
PN 10 to PN 16  
Standards : ISO 10931  
ASTM Sch 40/80



**Liner**

Range : 16 - 160 mm  
1" - 8"  
Standards : Custom Size

## Applications



Bromine Plants | Insecticides, Pesticides & Agrochemical Plants | Solvents | Catalysts | Chromic Acid Service in Chrome Plating | PV Crystal Cells & Semi-Conductor Industry | Edible Phosphoric Acid Plants | Food Grade Chemicals Plants | Pharmaceuticals | High-Purity Applications | DI Water Plants | Formic Acid Service | Concentrated Acids | Higher Temperature Applications | Nuclear Power & Nuclear Fuel Industry | Precious Metal Plants.

## FITTINGS



**Socket Fusion**

Type : Moulded  
Range : 20 - 110 mm  
Standards : DIN16962



**Butt Fusion**

Type : Moulded  
Range : 20 - 225 mm  
Standards : DIN16962



**Butt Fusion**

Type : Fabricated  
Range : 20 - 225 mm  
Standards : DIN16962



## Corporate Office


Sangir Plastics Pvt. Ltd. Mandhana Enclave, Bangur Nagar, Goregaon (West),  
Mumbai-400104, Maharashtra, India.

## Branch Offices :

Vadodara | Ahmedabad | Vapi | Bharuch | Kolkata | Bangalore | Delhi | Chennai | Pune | Hyderabad | Visakhapatnam

## Manufacturing Sites :

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