

PVDF Homopolymers & Flexible Copolymers for Wire and Cable

Kynar® and Kynar Flex® fluoropolymer resins offer a wide range of extreme properties to suit the most demanding needs of the wire & cable industry.

Kynar® PVDF resins retain excellent physical properties in extreme chemical and thermal environments allowing them to be used when flexibility and toughness are required. The chemical resistance of Kynar® and Kynar Flex® PVDF resins allows for use in corrosive chemical, acid, and extreme temperature environments. Kynar® PVDF resins also provide exceptional abrasion resistance, excellent UV resistance, inherent flame resistance, and low smoke generation.

The excellent flame, smoke, and heat resistance properties of Kynar® PVDF are naturally achieved through its chemical structures, requiring no additives. Virgin Kynar® resin does not easily burn and will self-extinguish when the flame source is removed making it ideal for building plenum applications. Its high mechanical strength, abrasion resistance, and cut-through resistance allow Kynar® PVDF to maintain the integrity of the cable insulation and to withstand the abuses during the installation of plenum cable. In addition to fire performance, many grades of Kynar® PVDF are rated at 150°C RTI and are NYC Local Law 5 Compliant for fire alarm cables.

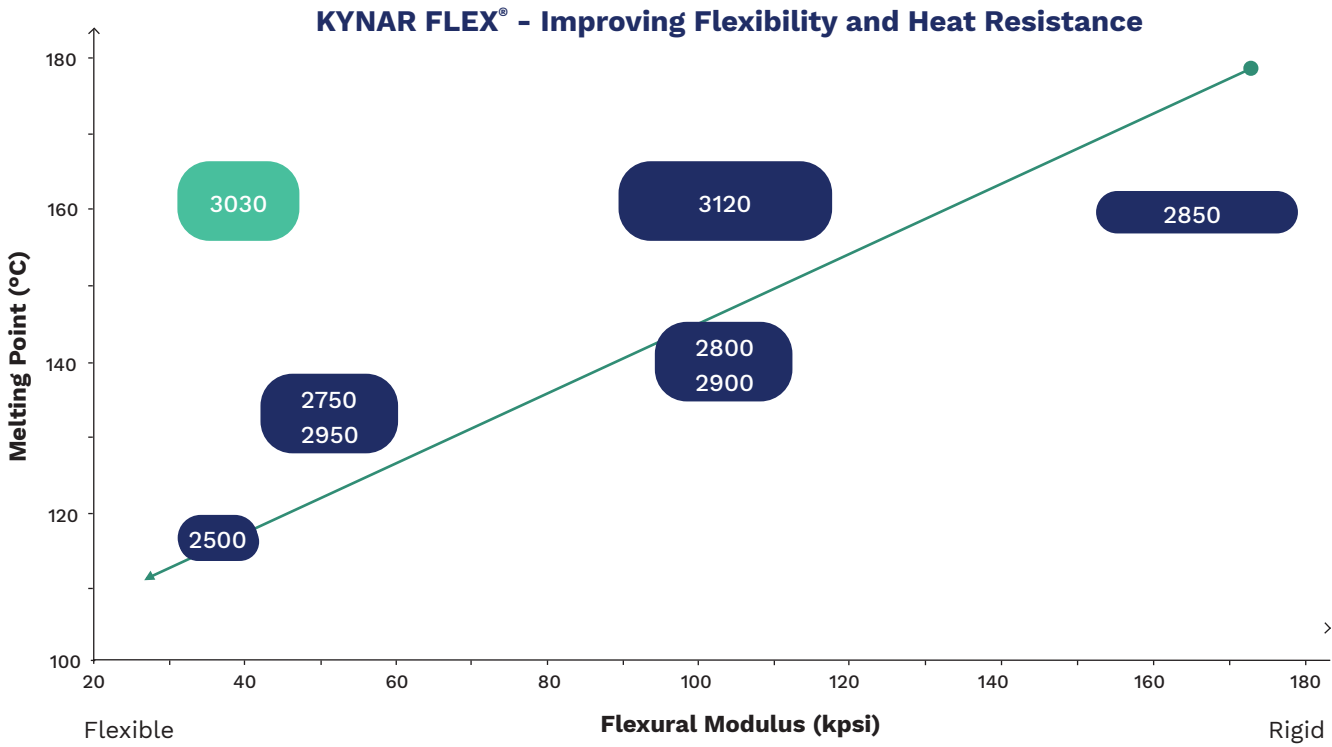
Common Applications

- Outdoor cable applications requiring extreme long term UV resistance
- Plenum cables
- Plastic optical fibers
- Heat shrinkable tubing
- Jacket insulation for fiber optic cables
- Jacket insulation for shielded constructions: coaxial cables, shielded twisted pair cables
- Insulations for power limited and fire alarm cables
- Military specification, cross-linkable Mil-Spec 81044 wire
- Fiber optic raceways
- Foamed jacket insulations
- Cathodic protection cables
- Insulated down well cables
- Connectors



PHYSICAL PROPERTIES	TEST METHOD	UNITS	KYNAR® VF ₂ HOMOPOLYMERS		KYNAR FLEX® VF ₂ / HFP COPOLYMERS				
			460	740	2500-20	2750-01	2800-00	2850-00	3030-10
Melting Point	ASTM 3418	°C	155	168	117	130	140	155	160
Flexural Modulus	ASTM D638	kpsi	200-260	240-335	28-40	45-75	90-120	150-180	36-42
Limiting Oxygen Factor	ASTM D2863	% O ₂	43	43	42	43	42	43	45
Temperature Rating	UL RTI	°C	145	158	107	120	130	145	150

PHYSICAL PROPERTIES	TEST METHOD	UNITS	KYNAR FLEX® VF ₂ / HFP COPOLYMERS		FLAME RETARDANT KYNAR FLEX® VF ₂ / HFP COPOLYMERS			
			3120-10	3120-50	2900-04	2950-05	3030-15	3120-15
Melting Point	ASTM 3418	°C	161	161	140	130	160	161
Flexural Modulus	ASTM D638	kpsi	90-120	90-120	90-120	45-75	36-44	90-120
Limiting Oxygen Factor	ASTM D2863	% O ₂	42	42	75	95	>90	95
Temperature Rating	UL RTI	°C	151	151	130	120	150	151



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