

TECHNICAL DATA SHEET

KYNAR® 720 S

FLUORINATED HOMOPOLYMER PELLET

KYNAR® resins are fluorinated thermoplastic homopolymers.

Outstanding characteristics: chemical resistance, imperviousness to UV, high barrier properties, high purity, good mechanical and thermo-mechanical properties.

KYNAR® 720 S resin is a stabilized grade of granules for injection molding. This product is NSF/ANSI/CAN 61 certified.

TYPE

PVDF

MAIN APPLICATIONS

- 高純度
- 成形

配送形態

- ペレット

変換プロセス

- 射出成形

RHEOLOGICAL PROPERTIES

プロパティ	価値	UNIT	テスト基準
Melt viscosity, 230°C (445°F) at 100 s-1	4 - 8	kPo	ASTM D3835
Shrinkage, Normal (t+24h)	2.0	%	ISO 294-4
Shrinkage, Parallel (t+24h)	2.0	%	ISO 294-4
Melt flow index (MFR), 235°C / 5 kg (455°F / 11 lb)	19 - 35	g/10min	ASTM D1238
Melt volume flow rate (MVR), 230°C / 5 kg (446°F / 11 lb)	20	cm³/10min	ISO 1133

MECHANICAL PROPERTIES

プロパティ	価値	UNIT	テスト基準
Yield stress, 23°C (73°F)	44.8 - 55.2	MPa	ASTM D638
Stress at break, 23°C (73°F)	34.5 - 55.2	MPa	ASTM D638
Compression strength, 23°C (73°F)	68.9 - 103	MPa	ASTM D695
Izod impact unnotched strength, 23°C (73°F)	1070-4214	J/m	ASTM D256
Izod impact notched strength, 23°C (73°F)	80-214	J/m	ASTM D256
Charpy unnotched impact strength, 23°C (73°F)	192	kJ/m2	ISO 179 1eU
Charpy unnotched impact strength, -30°C (-22°F)	208	kJ/m2	ISO 179 1eU
Charpy notched impact strength, 23°C (73°F)	8	kJ/m2	ISO 179 1eA
Charpy notched impact strength, -30°C (-22°F)	5	kJ/m2	ISO 179 1eA
Hardness, Shore D	76 - 80		ASTM D2240
Nominal strain at break, 23°C (73°F), 50 mm/min	>50	%	ISO 527-1/-2
Yield strain, 23°C (73°F), 50 mm/min	9	%	ISO 527-1/-2

KYNAR® 720 S

プロパティ	価値	UNIT	テスト基準
Flexural modulus, 23°C (73°F)	1380 - 2310	MPa	ASTM D790
Tensile modulus, 23°C (73°F)	2300	MPa	ASTM D638
Coefficient of friction dynamic vs steel, 23°C (73°F)	0.14		ASTM D1895
Coefficient of friction static vs steel, 23°C (73°F)	0.2		ASTM D1894
Abrasion resistance, Wheel CS 17, load 1 kg, 1000 cycles	5 - 9	mg	ASTM G195-13A

THERMAL PROPERTIES

プロパティ	価値	UNIT	テスト基準
Glass transition temperature, 10°C/min	-40	°C	ISO 11357-1/-2
Vicat softening temperature, 50N at 50°C/h	140	°C	ISO 306
Limiting oxygen index (LOI)	44	%	ASTM D2863
Yellow card available	yes		
Coefficient of linear thermal expansion, 23°C (73°F)	119 - 144	10E-6 / °K	ASTM D696
Specific heat temperature, 23°C (73°F)	665 - 958		ISO 11357-1/-2
Heat deflection temperature, 0.45 MPa	130	°C	ISO 75-1/-2
Heat deflection temperature, 1.8 MPa	110	°C	ISO 75-1/-2
Heat deflection temperature, 1.8 MPa, 138°C/h	105 - 115	°C	ASTM D648
Heat deflection temperature, 0.45 MPa, 138°C/h	125-140	°C	ASTM D648
Thermal conductivity	0.17 - 0.19	W/m-K	ASTM D433
Melting temperature, 10°C/min	168	°C	ISO 11357-1/-3

ELECTRICAL PROPERTIES

プロパティ	価値	UNIT	テスト基準
Dielectric constant, 1kHz	4.5 - 9.5		ASTM D150
Dielectric strength, 23°C (73,4°F)	1.7	kV/mm	ASTM D149
Relative permittivity, 100Hz	9		
Relative permittivity, 1MHz	6		
Relative thermal index	150		
Dissipation factor, 100Hz	350	E-4	
Dissipation factor, 1MHz	2060	E-4	
Dissipation factor	0.01 - 0.21		ASTM D150

OTHER PROPERTIES

プロパティ	価値	UNIT	テスト基準
Specific gravity, 23°C (73°F)	1.77 - 1.79	g/cm³	
Water absorption, Saturated in water at 23°C (73°F)	0.03	%	ISO 62

KYNAR® 720 S

包装

Available packaging:

- 25 kg / 55 lb rigid container
- 600 kg / 1320 lb 硬質容器

特別な特性

- 炎と煙

Headquarter: Arkema France
51, Esplanade du Général de Gaulle
92800 Puteaux – France
T +33 (0)1 49 00 80 80

Disclaimer - Please consult Arkema's disclaimer regarding the use of Arkema's products on <https://www.arkema.com/global/en/products/product-safety/disclaimer/> which is incorporated herein by reference and made a part hereof.
Arkema France, a French société anonyme registered at the Trade and Companies Register of Nanterre under the number 319 632 790

[arkema.com](https://www.arkema.com)

