KYNAR®

TECHNICAL DATA SHEET
KYNAR® 1000 HD

FLUORINATED HOMOPOLYMER PELLET

KYNAR® resins are fluorinated thermoplastic homopolymers. Outstanding characteristics:chemical resistance, imperviousness to UV, high barrier properties, high purity, good mechanical andThermo mechanical properties KYNAR® 1000 HD resin is a standard grade of granules for compression and transfer molding, for extrusion of thick walled parts: blocks, rods, plaques, tubes

TYPE

PVDF

MAIN APPLICATIONS

- 高純度
- CPI - 配布
- 成形
- チューブ
- 空圧パイプ
- CPI - ストックシェイプ

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	15 - 20	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)	1 - 3	g/10min	ASTM D1238
Melt volume flow rate (MVR), 230°C / 5 kg (446°F / 11 lb)	1.1	cm^3/10min	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	ISO 527-1/-2
Yield strain, 23°C (73°F), 50 mm/min	9	%	ISO 527-1/-2
Stress at break, 23°C (73°F)	34.5 - 55.2	MPa	ASTM D638
Nominal strain at break, 23°C (73°F), 50 mm/min	>50	%	ISO 527-1/-2
Compression strength, 23°C (73°F)	68.9 - 103	MPa	ASTM D695
Charpy unnotched impact strength, 23°C (73°F)	No Break		ISO 179 1eU
Charpy unnotched impact strength, -30°C (-22°F)	No Break		ISO 179 1eU
Charpy notched impact strength, 23°C (73°F)	22	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

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プロパティ	価値	UNIT	テスト基準
Flexural modulus, 23°C (73°F)	1450 - 2310	MPa	ISO 178
Tensile modulus, 23°C (73°F), 1 mm/min	2000	MPa	ISO 527-1/-2

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	138	°C	ISO 306
Limiting oxygen index (LOI)	60	%	ASTM D2863
Coefficient of linear thermal expansion, 23°C (73°F)	11.9 - 14.4	10E-6 / °K	ASTM D696
Specific heat temperature, 23°C (73°F)	745 - 958		ISO 11357-1/-2
Heat deflection temperature, 1.8 MPa	104	°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	172	°C	ISO 11357-1/-3

ELECTRICAL PROPERTIES

プロパティ	価値	UNIT	テスト基準
Comparative tracking index	600		IEC 60112
Relative permittivity, 100Hz	10.5		
Relative permittivity, 1MHz	7		
Relative thermal index	150		
Dissipation factor, 100Hz	270	E-4	
Dissipation factor, 1MHz	2400	E-4	

OTHER PROPERTIES

プロパティ	価値	UNIT	テスト基準
Moisture absorption, At equilibrium at 23°C (73°F) / 50%HR	0.015	%	ISO 62
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

包装

Available packaging:

- 850 kg / 1870 kb 硬质容器
- 25 kg / 55 lb 袋
- 25 kg / 55 lb rigid container
- 600 kg / 1320 lb 硬质容器
- 800 kg / 1765 lb big bag

KYNAR® 1000 HD

特別な特性

- 炎と煙

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