

KYNAR®

460

Kynar® resins are fluorinated thermoplastic homopolymers.

Outstanding characteristics: chemical resistance, imperviousness to UV, high barrier properties, high purity, good mechanical and thermo-mechanical properties. This product is NSF/ANSI/CAN 61 certified.

Kynar® 460 resin is a standard grade of granules for extrusion of tubes, cables and plaques, compression and transfer molding.

特性	値	単位	テスト基準
レオロジー特性			
メルトポリュームレイト	5.6	cm ³ /10min	ISO 1133
温度	230	°C	-
	446	°F	-
荷重	21.6	kg	-
	47.6	lb	-
メルトフローレイト	6 - 14	g/10min	ASTM D1238
温度	230	°C	-
荷重	21.6	kg	-
成形収縮率, 平行	2.0	%	ISO 294-4, 2577
成形収縮率, 直角	2.0	%	ISO 294-4, 2577
熔融粘度, 230°C, 100 s ⁻¹	23.5 - 29.5	kPoise	ASTM D3835
機械的特性			
引張弾性率	1400	MPa	ISO 527-1/-2
	203000	psi	
引張弾性率, 73 °F	1030 - 1380	MPa	ASTM D638
	150000 - 200000	psi	
降伏応力	42	MPa	ISO 527-1/-2
	6090	psi	
降伏応力, 73 °F	34.5 - 51.7	MPa	ASTM D638
	5000 - 7500	psi	
降伏ひずみ	13	%	ISO 527-1/-2
降伏点伸び, 73 °F	10 - 15	%	ASTM D638
破壊呼びひずみ	>50	%	ISO 527-1/-2
破壊応力, 73 °F	31 - 48.3	MPa	ASTM D638
	4500 - 7000	psi	
破断伸び, 73 °F	50 - 250	%	ASTM D638

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Taber 耐摩耗性, CS 17 1000g:pad	7 - 9	mg/100 cycles	ASTM-G195-13A
ショア硬さ, D, 73 °F	75 - 80	-	ASTM D2240
曲げ弾性率, 73 °F	1380 - 1790	MPa	ASTM D790
	200000 - 260000	psi	
5%伸び時の曲げ強度, 73 °F	48.3 - 62.1	MPa	ASTM D790
	7000 - 9000	psi	
圧縮強度, 73 °F	55.2 - 68.9	MPa	ASTM D695
	8000 - 10000	psi	
衝撃試験, 73 °F	0.801 - 2.14	kJ/m	ASTM D256
	15 - 40	ftlb/in	
ノッチ付き衝撃強さ, 73 °F	0.0961 - 0.214	kJ/m	ASTM D256
	1.8 - 4	ftlb/in	
摩擦係数, 静力学対鋼, 73°F	0.23	-	ASTM D1894
摩擦係数, 動的対鋼, 73°F	0.17	-	ASTM D1894
熱的特性			
溶融温度, 10°C/min	161	°C	ISO 11357-1/-3
溶融温度	155 - 172	°C	ASTM D3418
ガラス転移点, 10°C/min	-40	°C	ISO 11357-1/-2
ガラス転移温度 (Tg)	-40.6 - -38.3	°C	ASTM D7028
	-41 - -37	°F	
荷重たわみ温度, 1.80 MPa	85	°C	ISO 75-1/-2
	185	°F	
荷重たわみ温度, 264 Psi, 248 °F/hr	80 - 90	°C	ASTM D648
	176 - 194	°F	
荷重たわみ温度, 66 Psi, 248 °F/hr	112 - 140	°C	ASTM D648
	234 - 284	°F	
線膨張係数-40°C to +100°C, 平行	114	E-6/K	ISO 11359-1/-2
線膨張係数, 73 °F	9 - 12.6	10E-5/°C	ASTM D696
	5 - 7	10E-5/°F	
1.5mm厚さでの燃焼性	V-0	class	IEC 60695-11-10
厚さhでの燃焼性	V-0	class	IEC 60695-11-10
試験片の厚さ	0.8	mm	-
	0.0315	in	
酸素指数	43	%	ISO 4589-1/-2

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酸素指数	44	%	ASTM D2863
熱伝導率	0.17 - 0.19	W/(m K)	ASTM D433
	1.18 - 1.32	BTU in / (hr ft ² F)	
比熱	745 - 958	J/(kg K)	DSC
	0.28 - 0.36	BTU/(lb °F)	
空気中の熱分解	375	°C	1% wt. loss
	707	°F	
窒素中での熱分解	410	°C	1% wt. loss
	770	°F	
電気的特性.			
比誘電率, 100Hz	9	-	IEC 60250
比誘電率, 1MHz	6.7	-	IEC 60250
比誘電率, 1 kHz	4.5 - 9.5	-	ASTM D150
誘電正接, 100Hz	1300	E-4	IEC 60250
誘電正接, 1MHz	700	E-4	IEC 60250
誘電正接, 100 kHz	0.01 - 0.21	-	ASTM D150
体積抵抗率	2E12	Ohm* m	IEC 62631-3-1
体積抵抗率, DC 68 °F, 65% R.H.	2E14	Ohm* cm	ASTM D257
表面抵抗率, 73 °F	5.1E11 - 5.3E11	Ohm per square	ASTM D257
耐電圧	63	kV/m	IEC 60243-1
	1600	kV/in	
耐電圧, 73°F	1.6	kV/mil	ASTM D149
その他の特性.			
吸水率, 23°C, immersion, equilibrium	0.04	%	ISO 62
吸水率	≤ 0.04	%	ASTM D570
密度	1760	kg/m ³	ISO 1183
	1.76	g/cm ³	
比重, 73 °F	1.75 - 1.77	-	ASTM D792
熔融時の熱伝導率	0.19	W/(m K)	-
光学特性			
Refractive Index @ sodium D line	1.42	-	ASTM D542

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Main applications:

- corrosion protection in the chemical industry
- coating (painting, co-extrusion)
- off shore
- wire and cable

成形加工法 異形押出成形, その他の押出成形	Headquarters: Arkema France 420 rue d'Estienne d'Orves 92705 Colombes Cedex France T +33 (0)1 49 00 80 80 hpp.arkema.com Arkema Inc. – High Performance Polymers 900 First Avenue King of Prussia, PA 19406 Tel.: +1 610 205 7000 hpp.arkema.com
納入形状 ペレット	
領域別の利用可能性 北アメリカ, ヨーロッパ, アジア/太平洋地域, 南・中央アメリカ, 近東/アフリカ	

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