

KYNAR FLEX®

3120-15

Kynar Flex® resins are fluorinated thermoplastic copolymers.

Kynar Flex® 3120-15 resin has been specifically designed for use in wire and cable constructions which require a 150°C rating and improve flame and smoke resistance.

Kynar Flex® 3120-15 resin is easily processed and has excellent physical, mechanical, thermal and flame resistant characteristics. Its low viscosity allows easy processing.

Additional Characteristics:

- Excellent thermal stability
- Excellent abrasion resistance
- High Limiting Oxygen Index
- Extremely low smoke emission characteristics

Kynar Flex® 3120-15 resin meets the smoke and flame requirements of UL 910.

特性	値	単位	テスト基準
レオロジー特性			
メルトボリュームレイト	4	cm³/10min	ISO 1133
温度	232	°C	-
	450	°F	-
荷重	3.8	kg	-
	8.38	lb	-
メルトフローレイト	4 - 18	g/10min	ASTM D1238
温度	230	°C	-
荷重	3.8	kg	-
溶融粘度, 230°C, 100 s⁻¹	6 - 12	kPoise	ASTM D3835
機械的特性			
引張弾性率	700	MPa	ISO 527-1/-2
	102000	psi	
引張弾性率, 73 °F	689 - 1170	MPa	ASTM D638
	100000 - 170000	psi	
降伏応力	27	MPa	ISO 527-1/-2
	3920	psi	
降伏応力, 73 °F	24.1 - 34.5	MPa	ASTM D638
	3500 - 5000	psi	
降伏ひずみ	15	%	ISO 527-1/-2
降伏点伸び, 73 °F	10 - 20	%	ASTM D638
破壊呼びひずみ	>50	%	ISO 527-1/-2

Arkema France - A French "société anonyme", registered in the Nanterre (France) Trade and Companies Register under the number 319 632 790 SDC/11-2018
Source: automatically generated TDS from Material Database on 20-02-2024

KYNAR FLEX®

3120-15

破壊応力, 73 °F	34.5 - 48.3	MPa	ASTM D638
	5000 - 7000	psi	
破断伸び, 73 °F	300 - 500	%	ASTM D638
Taber 耐摩耗性, CS 17 1000g:pad	16 - 19	mg/1000 cycles	ASTM-G195-13A
ショア硬さ, D, 73 °F	65 - 70	-	ASTM D2240
曲げ弾性率, 73 °F	621 - 827	MPa	ASTM D790
	90000 - 120000	psi	
5%伸び時の曲げ強度, 73 °F	20.7 - 34.5	MPa	ASTM D790
	3000 - 5000	psi	
圧縮強度, 73 °F	31 - 41.4	MPa	ASTM D695
	4500 - 6000	psi	
ノッチ付きシャルピー衝撃強さ, +23°C	未破壊	kJ/m ²	ISO 179/1eA
衝撃試験, 73 °F	未破壊	kJ/m	ASTM D256
ノッチ付き衝撃強さ, 73 °F	未破壊	kJ/m	ASTM D256
摩擦係数, 静力学対鋼, 73°F	0.31	-	ASTM D1894
摩擦係数, 動的対鋼, 73°F	0.3	-	ASTM D1894
熱的特性			
溶融温度, 10°C/min	164	°C	ISO 11357-1/-3
溶融温度	161 - 168	°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)	-41.1 - -39.4	°C	ASTM D7028
	-42 - -39	°F	
温度定格	150	°C	UL RTI
	302	°F	
荷重たわみ温度, 1.80 MPa	48	°C	ISO 75-1/-2
	119	°F	
荷重たわみ温度, 264 Psi, 248 °F/hr	43.3 - 54.4	°C	ASTM D648
	110 - 130	°F	
荷重たわみ温度, 0.45 MPa	65	°C	ISO 75-1/-2
	149	°F	
荷重たわみ温度, 66 Psi, 248 °F/hr	54.4 - 76.7	°C	ASTM D648
	130 - 170	°F	
線膨張係数, 73 °F	12.6 - 18.5	10E-5/°C	ASTM D696
	7 - 10.3	10E-5/°F	

Arkema France - A French "société anonyme", registered in the Nanterre (France) Trade and Companies Register under the number 319 632 790 SDC/11-2018
Source: automatically generated TDS from Material Database on 20-02-2024

KYNAR FLEX®

3120-15

1.5mm厚さでの燃焼性	V-0	class	IEC 60695-11-10
試験片の厚さ	1.5	mm	-
	0.0591	in	
Yellow Card 可用	はい	-	-
厚さhでの燃焼性	V-0	class	IEC 60695-11-10
試験片の厚さ	1.0	mm	-
	0.0394	in	
酸素指数	95	%	ISO 4589-1/-2
酸素指数	95	%	ASTM D2863
熱伝導率	0.144 - 0.18	W/(m K)	ASTM D433
	1 - 1.25	BTU in	
比熱	745 - 958	(hr ft ² / (kg K))	DSC
	0.28 - 0.36	BTU/(l b °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	
相対熱指数, 機械的	150	°C	UL 746B
	302	°F	
相対熱指数, 電気	150	°C	UL 746B
	302	°F	
電気的特性.			
比誘電率, 100Hz	6.7	-	IEC 60250
比誘電率, 1 kHz	3.2 - 10.2	-	ASTM D150
誘電正接, 100Hz	0.105	E-4	IEC 60250
誘電正接, 100 kHz	0.02 - 0.19	-	ASTM D150
体積抵抗率	2E12	Ohm* m	IEC 62631-3-1
表面抵抗率, 73 °F	5.9E11 - 6.1E11	Ohm per square	ASTM D257
耐電圧, 73°F	1.3 - 1.5	kV/mil	ASTM D149
その他の特性.			
吸水率	0.03 - 0.05	%	ASTM D570
密度	1780	kg/m ³	ISO 1183
	1.78	g/cm ³	

Arkema France - A French "société anonyme", registered in the Nanterre (France) Trade and Companies Register under the number 319 632 790 SDC/11-2018
Source: automatically generated TDS from Material Database on 20-02-2024

KYNAR FLEX®

3120-15

比重, 73 °F

1.77 - 1.8

-

ASTM D792

成形加工法 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	
添加剤 滑剤	
特殊な特性 熱安定化, 光安定化	
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	

The statements, technical information and recommendations contained herein are believed to be accurate as of the date hereof. Since the conditions and methods of use of the product and of the information referred to herein are beyond our control, ARKEMA expressly disclaims any and all liability as to any results obtained or arising from any use of the product or reliance on such information; NO WARRANTY OF FITNESS FOR ANY PARTICULAR PURPOSE, WARRANTY OF MERCHANTABILITY OR ANY OTHER WARRANTY, EXPRESSED OR IMPLIED, IS MADE CONCERNING THE GOODS DESCRIBED OR THE INFORMATION PROVIDED HEREIN. The information provided herein relates only to the specific product designated and may not be applicable when such product is used in combination with other materials or in any process. The user should thoroughly test any application before commercialization. Nothing contained herein constitutes a license to practice under any patent and it should not be construed as an inducement to infringe any patent and the user is advised to take appropriate steps to be sure that any proposed use of the product will not result in patent infringement.