

High Temperature Alumina Polycrystalline Fiber Cotton



Catachrestic:

KD- F The polycrystalline alumina fiber prepared by sol-gel method is characterized by low volume weight, low thermal conductivity, good thermal shock resistance, high service temperature, good chemical stability and good corrosion resistance, etc. It is widely applied in metallurgy, building materials, ceramics, and aerospace industries.

Application:

1. Made into fiber insulating felt/board or special shaped fiber products used in furnaces with service temperature above 1000-1800
2. Filling materials in expansion joints or short-term insulating patch
3. Reinforcing materials of piston, brake block or other alloy composites
4. Heat insulating layer of rocket motor or other insulating materials in aerospace industry.

Product		KD-F-1100	KD-F-1300	KD-F-1450	KD-F-1600	KD-F-1700	KD-F-1700A
Max. service temperature		1100	1300	1450	1600	1700	1700
Classify		High Purity	High Alumina	Comprise ZR	polycrystalline	polycrystalline	polycrystalline
Chemical Compositions %	Al ₂ O ₃	≥45	≥54	≥36	≥72	≥80	≥95
	SiO ₂	≥52	≥46	≥48	≥28	≥20	≥5
	Al ₂ O ₃ + SiO ₂	≥98	≥99	—	≥99.5	≥99.5	≥99.5
	Fe ₂ O ₃	≤0.8	≤0.2	≤0.1	—	—	—
	ZrO ₂	—	—	≥15	—	—	—
Fiber length (mm)		—	—	—	20-100	20-100	20-100
Average single fiber tensile strength ≥MPa		—	—	—	800	800	500
Average diameter μm		2-4	2-4	3-5	4	3.9	3.7
Slag-ball content (>0.212mm), %		≤22	≤20	≤18	≤1	≤1	≤1
Packaging specifications		Preparation bag			Carton, NW 3kg / box		

Remark: Product technique data are an average value base on standard test, it will fluctuate in a certain range, is not the quality assurance data of the product.