



FibreX 430 Data Sheet

FibreX 430 Stainless Steel Fibres reinforce monolithic refractories against thermal and mechanical shock by reducing cracking and spalling susceptibility.

The fibres can be used in refractory operating conditions of:

- Moderate thermal cycling, or
- Continuous fibre soaking temperature up to 1000°C in refractory
- Moderate mechanical shock
- Reasonable high temperature oxidation resistance

Chemical Composition (maximum unless stated):

C	Si	Mn	P	S	Cr	Ni	Others
0.40	3.5	2.0	0.050	0.030	14.0-18.0	0.5	-

Melting Temperature: 1480-1530°C

Critical Oxidation Temperature:

Cyclic Heating: 870 °C

Continuous Service: 1000 °C

Tensile Strength:

20 °C 850 MPa

870 °C 47 MPa

Modulus of Elasticity (870°C): 83 GPa

Coefficient of Thermal Expansion (870°C): $13.7 \times 10^{-6} / ^\circ\text{C}$

Thermal Conductivity (540°C): 26.5 W/mK

ME Fibre – Typical Dimensions and Aspect Ratios

Fibre ^{*1} Length	Typical Equivalent Dia ^{*2}	Typical Aspect ^{*3} Ratio	Typical No/kg
12mm	0.30mm	40	151,000
20mm	0.40mm	50	51,000
25mm	0.50mm	50	26,000
25mm	0.60mm	42	18,100
35mm	0.60mm	58	12,000
35mm	0.70mm	50	5,000

^{*3} Aspect ratio is calculated as fibre length ÷ diameter

^{*1} Other fibre lengths can be manufactured on request

^{*2} Other fibre diameters can be manufactured on request

HOW
TO
BUY
FIBRE

TEL: +44 (0) 1773 863100

sales@fibretch.com

www.fibretch.com

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