ME430™ Data Sheet

ME430 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 1000ºC 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	0.10	14.0-18.0	0.5	-

Melting Temperature: 1480-1530°C

Critical Oxidation Temperature:

Cyclic Heating: 850 °C

Continuous Service: 1000 °C

Tensile Strength:

20 °C 850 MPa

870 °C 47 MPa

Modulus of Elasticity (870ºC): 83 GPa

Coefficient of Thermal Expansion (870ºC): 13.7 @10^{-6} /ºC

Thermal Conductivity (540ºC): 26.5 W/m^2K

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

FIBRETECH

TEL : +44 (0)1773 863100
FAX : +44 (0)1773 580287
Email:info@fibretech.com