

## MIGHTYFIBER SIL2-HCA-20

*MightyFiber SIL2-HCA-20 is part of a family of composite products consisting of a blend of oxidation resistant stainless steel fibres combined with a fine grained castable matrix. This combination allows Pre-cast elements to be produced which exhibit extreme Thermal Shock, Impact and Erosion resistance combined with super high strengths. Manufacture does not use the established infiltration method; instead a mixing technique is employed which allows a coarser and much stronger matrix to be used than previously possible. This product can only be supplied in the form of pre-cast shapes.*

<b><u>MAXIMUM SERVICE TEMPERATURE (M.S.T.)</u></b>	1650°C	
<b><u>CERAMIC COMPONENT</u></b>	Tabular Alumina and Mullite based Low Cement Castable	
<b><u>FIBRE COMPONENT</u></b>	High Chrome Aluminium, Oxidation resistant Stainless steel	
<b><u>MIXING WATER</u></b>	4.5 – 5.0% (as a percentage of the whole)	
<b><u>BULK DENSITY</u></b> Fired to 815°C	200 - 208 lbs/ft <sup>3</sup>	3200 - 3330 Kg/m <sup>3</sup>
<b><u>COLD CRUSHING STRENGTH</u></b> Fired to 815°C	25,000 – 32,000 Psi	1724 - 2206 Kg/cm <sup>2</sup>
<b><u>COLD MODULUS OF RUPTURE</u></b> Fired to 815°C	8,000 – 13,000 Psi	552 - 896 Kg/cm <sup>2</sup>
<b><u>PERMANENT LINEAR CHANGE</u></b> 110-815°C	0.0 TO -0.20 %	
<b><u>EROSION RESISTANCE @815°C</u></b>	3.5cc Max (2.5cc Typical)	
<b><u>MAXIMUM GRAIN SIZE</u></b>	2mm	

### TYPICAL CHEMICAL ANALYSIS OF CERAMIC COMPONENT (%)

Al <sub>2</sub> O <sub>3</sub>	SiO <sub>2</sub>	Fe <sub>2</sub> O <sub>3</sub>	CaO	MgO	TiO <sub>2</sub>	SiC
83.6	8.0	0.2	2.45	0.03	0.3	4.4

The properties shown on this data sheet represent typical average results generated using standard ASTM test methods (unless otherwise noted) conducted under controlled conditions and should not be considered to be guaranteed specifications. Properties are subject to normal manufacturing statistical standard deviation ranges, and Resco Products, Inc. reserves the right to modify the properties and specifications at any time without prior notice. RESCO PRODUCTS disclaims any expressed or implied warranties based on this sheet. 01/08/13 is the date that this data sheet was updated. Check with your RESCO sales representative or RESCO website to determine you have the current sheet