



# CT-8 DRY PRESS-READY CERAMIC BLEND

› Engineered Ceramic Blend



SUPER TOUGH



HEAT TRANSFER



SUPER STRONG

## TECHNICAL DATA SHEET

### 1. TYPICAL PROPERTIES

DENSITY, g/cm <sup>3</sup>	3.87
FLEXURAL STRENGTH, MPa	450-500
YOUNG'S MODULUS, GPa	385
VICKERS HARDNESS, GPa	18.3
FRACTURE TOUGHNESS, MPa · m <sup>1/2</sup>	4.5-5
THERMAL CONDUCTIVITY, W / m · K	26
THERMAL SHOCK RESISTANCE (ΔT)	400°C
COEFFICIENT OF THERMAL EXPANSION, 10 <sup>-6</sup> /°C	7.2

### 2. PRODUCT DESCRIPTION

C-TUFF™ CT-8 is a dry press-ready engineered blend of C-TUFF silicon carbide microfiber (SFC) and alumina used to produce highly wear resistant ceramics. It is characterized by excellent wear resistance and thermal and dimensional stability. CT-8 is completely inert and can be used in the most demanding physical and chemical environments.

### 3. APPLICATION INFORMATION

For use in high performance ceramic wear parts, including dies, pipe liners, nozzles, and other critical process equipment. CT-8 is de-binded in air or vacuum, and fired in inert gas at atmospheric pressure. For applications which require the utmost fracture resistance, C-TUFF™ HA9S should be considered.

### 4. PACKAGING AND PRODUCT HANDLING

CT-8 is packaged a dry powder in 315 Lb. (143kg) bags contained in drums. Smaller quantities are available for development purposes. Dry CT-8 powder must be handled in a controlled environment. Please consult the Safety Data Sheet at ([www.Haydale-technologies.com](http://www.Haydale-technologies.com)) for additional safety and handling information. Other product forms may be available on request.

### 5. CONTACT HAYDALE CERAMIC TECHNOLOGIES,

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