

Typical Properties-Sintered Ceramic

Density	g/cm ³	3.87
Flexural Strength	MPa	450 – 500
Young's Modulus	GPa	385
Vickers Hardness	GPa	18.3
Fracture Toughness	MPa · m ^{1/2}	4.5 – 5
Thermal Conductivity	W / m · K	26
Thermal Shock Resistance (ΔT)	°C	400
Coefficient of Thermal Expansion	10 ⁻⁶ / °C	7.2



Product Description

CERAMTUFF™ A4AS is a dry press-ready engineered blend of Silar® silicon carbide whisker and alumina used to produce highly wear resistant ceramics. It is characterized by excellent wear resistance and thermal and dimensional stability. A4AS is completely inert and can be used in the most demanding physical and chemical environments.

Application Information

For use in high performance ceramic wear parts, including dies, pipe liners, nozzles, and other critical process equipment. A4AS is de-binded in air or vacuum, and fired in inert gas at atmospheric pressure. For applications requiring utmost fracture resistance, CERAMTUFF™ HA9S should be considered.

Packaging and Product Handling

A4AS is packaged as a dry powder in 315lb (143kg) bags contained in drums. Smaller quantities are available for development purposes. Dry A4AS powder must be handled in a controlled environment. Please consult the SDS (www.haydale-technologies.com) for additional safety and handling information. Other product forms may be available on request.

Contact Haydale Technologies Inc.

For technical and sales assistance, please e-mail sales@haydale-technologies.com

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