HIGH TEMP

HEAT TRANSFER

SUPER STRONG

HA9S HOT PRESS-READY CERAMIC BLEND

ADVANCED MATERIALS

TECHNICAL DATA SHEET

1. TYPICAL PROPERTIES

DENSITY, g/cm^3	3.72
FLEXURAL STRENGTH, MPa	550 - 700
MODULUS, GPa	400
FRACTURE TOUGHNESS, MPa-m^{½}	7 - 9
THERMAL CONDUCTIVITY, W / m · K	35
THERMAL SHOCK RESISTANCE (ΔT), °C	1000
COEFFICIENT OF THERMAL EXPANSION, 10^{-6}/°C	6.8

2. PRODUCT DESCRIPTION

Silar® HA9S is a press-ready engineered blend of Silar® silicon carbide whisker and alumina used to produce exceptionally tough ceramics. It is characterized by excellent fracture resistance, wear resistance, and thermal and dimensional stability. HA9S is completely inert and can be used in the most demanding physical and chemical environments.

3. PROCESSING AND APPLICATIONS

For use in high performance ceramic cutting tools and ceramic wear parts, including indexable inserts, dies, pipe liners, nozzles, and other critical process equipment. HA9S is supplied without binder and must be hot pressed under inert gas.

4. PACKAGING AND PRODUCT HANDLING

HA9S is packaged as a dry powder in 315lb (143kg) bags contained in drums. Smaller quantities are available for development purposes. Dry HA9S powder must be handled in a controlled environment. Please consult the material safety data sheet (www.haydale-technologies.com) for additional safety and handling information. Other product forms may be available on request.

5. CONTACT HAYDALE CERAMIC TECHNOLOGIES,

We believe in consultative sales and technical collaboration for success. Email us at sales@haydale-technoloies.com

Creating **Material** Change

haydale™ Advanced Materials