INSWOOL®-HP BULK

HarbisonWalker International

Product Data

8/05

Description: 2300°F Alumina-Silica Ceramic Fiber Bulk
INSWOOL®-HP BULK is a low iron, high purity alumina-silica bulk ceramic spun fiber blanket which can be used at temperatures to 2300°F. INSWOOL®-HP BULK demonstrates excellent high temperature resistance, thermal stability and resistance to vibration, as well as outstanding low thermal conductivity and low heat storage. It is resistant to attack under reducing atmospheres. It is attacked by acids and concentrated alkalies. The thermal and physical properties of INSWOOL®-HP BULK are completely restored upon drying if it becomes wet by water, steam, or oil.
INSWOOL®-HP BULK has a density of approximately 6 lb/ft^3 as it comes from the carton. The packed density ranges between 6 and 12 lb/ft^3 by hand packing, thus the installed density will vary depending upon the force used when packing.

Chemical Analysis: Approximate (Calcined Basis)	
Silica (SiO_2)	54.3%
Alumina (Al_2O_3)	45.0%
Iron Oxide (Fe_2O_3)	0.2%
Lime (CaO)	0.1%
Magnesia (MgO)	0.1%
Titania (TiO_2)	0.1%
Alkalies ($Na_2O + K_2O$)	0.2%

Physical Data (Typical)	
Maximum Service Temperature	
For Intermittent Use	2300°F (1260°C)
For Continuous Use	2150°F (1177°C)
Color	White
Fiber Length (Average)	3 in. (7.6 cm.)
Fiber Diameter	3 microns
Index of Refraction	1.543 (Yellow Light)
Apparent Specific Gravity	2.55
Thermal Conductivity	8 lb/ft^3 (0.13 g/cm^3)
At 600°F (316°C)	0.4 (.06)
At 1000°F (538°C)	0.8 (.12)
At 1400°F (760°C)	1.2 (.17)
At 1600°F (871°C)	1.4 (.20)

Note: The test data shown are based on average results on production samples and are subject to normal variation on individual tests. The test data cannot be taken as minimum or maximum values for specification purposes. ASTM test procedures used when applicable.