

# FIBERFRAX® DURABLANKET

Fiberfrax Durablanket is a strong, light weight, flexible blanket made from long Fiberfrax ceramic fibers.

Fiberfrax Durablanket is manufactured by cross locking alumina-silicate fibers through a unique forming process to produce a blanket with unexcelled handling strength. This material is a highly efficient insulator having low heat storage capacity and complete resistance to damage from thermal shock. Fiberfrax Durablanket can be used in wide range of applications as thermal insulation, particularly in fire protection and in domestic applications.

## General Characteristics

Fiberfrax Durablanket offers users a number of important advantages over other man-made mineral fibers:

- Excellent thermal and physical stability up to 1260°C
- Thermal shock resistance
- Light weight
- Resiliency
- Excellent cold handling strength
- Excellent corrosion resistance
- Excellent sound absorption

## Chemical Analysis (wt.%)

Al <sub>2</sub> O <sub>3</sub>	49.9
SiO <sub>2</sub>	51.7
Fe <sub>2</sub> O <sub>3</sub>	0.04
TiO <sub>2</sub>	0.002
Na <sub>2</sub> O <sub>3</sub>	0.1
CaO	0.02
Leachable Chlorides	<10ppm
Trace Inorganics	0.2

## Thermal Conductivity Data (W/mK)

Mean Temp	70 kg/m <sup>3</sup>	96 kg/m <sup>3</sup>	128 kg/m <sup>3</sup>
200°C	0.06	0.05	0.04
400°C	0.11	0.09	0.07
600°C	0.18	0.15	0.12
800°C	0.28	0.24	0.18



## Chemical Resistance

Fiberfrax Durablanket exhibits excellent resistance to attack from most corrosive agents with the exception of hydrofluoric acid, phosphoric acid and strong alkalis. The fibers also effectively resist oxidation and reduction. If wet by water or steam, thermal and physical properties are restored upon drying.

## Fire Test Data

Fiberfrax Durablanket is non-combustible in accordance with Australia Standard AS:1530 Part 1 – 1994 and is approved for use against cellulosic and hydrocarbon fires and for dry wrapping of structural steel.

## Typical Applications

- Furnace, Kiln and Boiler insulation.
- Furnace door lining and fire seals.
- Insulating blanket for field stress relieving welds.
- Flexible high temperature pipe insulation.
- Domestic cooker insulation.
- High temperature gasketing.

## Physical Properties

Colour	Blueish-White
Classification Temperature	1260°C
Melting Point	>1760°C
Fiber Diameter	2-3 microns
Specific Heat at 1100°C	1130 J/kg°C
Specific Gravity	2.63

## Permanent Linear Shrinkage, 24 hour soak

1000°C	<2.0%
1100°C	<4.0%