

## Ceramic fiber paper

### Brief description

Laurel ceramic fiber paper, is a lightweight refractory material processed from a blend of high purity alumina-silica fibers into a highly flexible, uniform sheet.

Ceramic fiber paper, has low shrinkage, good handling strength, and low thermal conductivity. It contains a small amount of organic binder for processing which makes it flexible, yet reduces off-gassing and odour during use. Our product has a highly uniform structure due to its controlled basis weight and thickness, assuring homogeneous thermal conductivity and a clean, smooth surface ideal for gasketing or sealing.

Ceramic fiber paper is completely free of asbestos and is designed to be an economic replacement for asbestos paper in most applications.

### Features

1. Easy to wrap, shape or cut
2. Lightweight
3. Low thermal conductivity; Low heat storage
4. Good uniformity and smooth appearance
5. Good flexibility and toughness and resistance to avulsion
6. Good dielectric strength and sound insulation
7. Excellent thermal shock resistance
8. Excellent chemical stability and machining property
9. Excellent corrosion resistance

### Technical data

Item	Standard	High Pure	High Aluminium	Zirconium	
Max. Temperature (°C)	1050	1150	1260	1430	
Shrinkage on Heating (%)	800°C×24h≤-3	1000°C×24h≤-3	1280°C×24h≤-3	1400°C×24h≤-3	
Organic Content (%)	≤5	≤5	≤5	≤5	
Thermal conductivity by mean temp. (W/m.k.) (250kg/m <sup>3</sup> )	200°C	0.055 ~ 0.065		0.060 ~ 0.070	
	400°C	0.110 ~ 0.120		0.105 ~ 0.125	
	600°C	0.160 ~ 0.170		0.170 ~ 0.180	
Chemical Composition(%)	Al <sub>2</sub> O <sub>3</sub>	43	47	55	38
	SiO <sub>2</sub>	53	51	44	44
	Fe <sub>2</sub> O <sub>3</sub> + TiO <sub>2</sub>	≤1.2	≤0.3	≤0.3	≤0.2
	CaO + MgO	≤0.3	≤0.3	≤0.3	≤0.2
	NaO + KO <sub>2</sub>	≤0.5	≤0.3	≤0.3	≤0.2
Density (kg/m <sup>3</sup> )	170-230				

### Applications

1. Die cut gaskets between castings in coke oven doors, blast furnace hot air piping, aluminium heat treating furnace, tuyeres and heat treat furnaces.
2. Backup for brick and monolithic refractories in blast furnace stoves, piping, tundish, ladle, hot metal cars, trough etc.
3. Mould wrapping for controlled cooling
4. SEN insulation wrapping
5. Shield for welding & brazing operation
6. Rotary kiln back-up insulation
7. Fabricated into tapout cones for Aluminium industry.
8. Strips in bottom of ingot mould for sealing
9. Expansion joint packing
10. Induction coil liner
11. Mould liner
12. Silencer interleaf
13. Ladle & tundish insulation
14. Asbestos paper replacement
15. Hot top linings
16. Thermal and electrical insulation

