

## Utility Grade Paper

### Features/Advantages

- Easy to cut wrap or form
- Temperature stability
- Low thermal conductivity
- Low heat storage
- Resilient
- Light Weight
- Thermal shock resistant
- High heat reflectance
- Good dielectric strength
- Excellent corrosion resistance

### Applications

- Parting plane in refractory linings
- Combustion chamber liners
- Backup lining for metal troughs
- Hot top linings
- Thermal and electrical insulation
- Refractory backup insulation
- Coke oven door shock absorption medium
- Kiln car deck covering

LyTherm® 970-L Commercial grade paper is processed from washed, spun, high purity alumina-silica fibers formed into a highly flexible sheet. It is recommended for continuous use at temperatures up to 2300° F (1260° C) in applications where insulating efficiency and high strength are important.

Because it is processed from washed fiber, LyTherm® 970-L paper is clean, has low shot content, and offers low thermal conductivity. Its highly uniform structure assures homogeneous thermal conductivity throughout, and its high tensile strength makes it ideal as a gasket, seal, or spacer material.

LyTherm® 970-L Commercial Paper contains an organic binder to provide increased handling strength at room temperature. It possesses excellent chemical stability and resists attack from most corrosive agents. Exceptions are hydrofluoric and phosphoric acids and concentrated alkalis. Because of its high-purity chemistry, LyTherm® 970-L Commercial paper resists both oxidation and reduction. If it becomes wet due to water, steam, or oil, its thermal and physical properties will return upon drying.

	970-LA	970-LF	970-LJ
Tensile Strength – gms/inch			
Machine Direction	2400	3200	6000
Cross Direction	2200	2700	5200
Mullen Burst – lbs/in <sup>2</sup> (kg/cm <sup>2</sup> )	7 (0.49)	10(0.70)	24(1.69)
Thickness Specifications:			
Nominal	1/32" (0.80mm)	1/16" (0.60mm)	1/8" (3.20mm)
Uncompressed (in. @ 4psf)	0.070	0.095	0.170

### Available Roll Sizes and Thicknesses

1/32"	#10	#25	MR
1/16"	#10	#25	MR
1/8"	#10	#5	MR

Available Widths: 12", 24", 36", 48"

(Other Widths Available up to 72" Maximum)

## Technical Data

<b>Melting Point</b>	3200°F (1760°C)
Maximum Use Temperature	2300°F (1260°C)
Typical Chemical Analysis:	
Al <sub>2</sub> O <sub>3</sub>	47.00%
SiO <sub>2</sub>	52.62%
Na <sub>2</sub> O	0.18%
Fe <sub>2</sub> O <sub>3</sub>	0.03%
Others	0.17%
LOI	8%
Density lbs/ft <sup>3</sup> (kg/m <sup>3</sup> )	6-9 (96-144)
Dielectric Strength (Volts/mil)	50

## Thermal Conductivity

Mean Temperature °F(°C)	BTU-in/hr/ft <sup>2</sup> /°F(w/m°C)
500 (260)	.39 (.057)
800 (427)	.55 (.079)
1300 (704)	.87 (.126)
1600 (871)	1.05 (.152)

