

# LYTHERM® 550-L

HIGH TEMPERATURE CERAMIC PAPERS

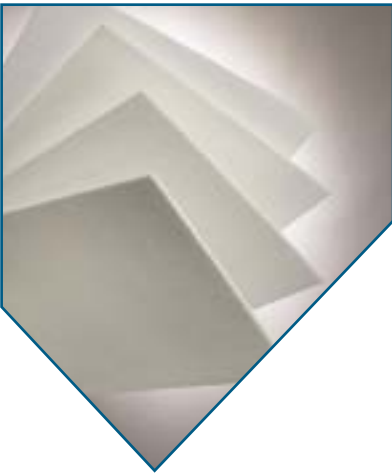
Partners  
in performance



## Utility Grade Papers

**LyTherm® 550-L** Utility Paper is processed from unwashed 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°) in applications where insulating efficiency is not critical. LyTherm 550-L is designed for use primarily in applications where thermal stability and high temperature protection are most important, such as a high temperature parting plane in refractory linings or as an expansion joint.

**LyTherm 550-L** utility paper contains an organic binder to provide increased handling strength at room temperature. It possesses excellent chemical stability and resists attack from corrosive agents. Exceptions are hydrofluoric and phosphoric acids and concentrated alkalies. Because of its high-purity chemistry, *LyTherm 550-L* utility 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.



- Easy to cut, wrap, or form
- Temperature stability
- Low thermal conductivity
- Low heat storage
- Light Weight
- Thermal Shock resistant
- High heat reflectance
- Excellent corrosion resistance
- ISO 9001: 2008 Certified

For outstanding thermal barrier's at high temperatures, trust Lydall LYTHERM® series.

**LYTHERM® 550-L Typical Properties**

Physical Properties	
Melting Point, °F (°C)	3200 (1760)
Use Limit, °F (°C)	2300 (1260)
LOI, %	8
Density, lb/ft³ (kg/m³)	6-9 (96 -144)
Dielectric Strength, V/mil	50
Mullen Burst, psi (1/16, 1/8)	8, 22

Chemical Properties %	
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

Tensile Strength lb/in, (kg/25mm)	550-LF	550-LJ
Machine Direction Tensile	7.72 (3.44)	14.33 (6.40)
Cross Direction Tensile	4.41 (1.97)	11.02 (4.92)

**Apparent Thermal Conductivity**

°F	BTU in/hr ft² °F	°C	W/mK
75	0.287	20	0.045
250	0.309	100	0.047
500	0.356	200	0.051
1000	0.510	400	0.063
1250	0.616	600	0.082
1500	0.742	800	0.107
2000	1.053	1000	0.139
2300	1.278	1260	0.189

\*Per ASTM C201, Hot Face Temperature

**LYTHERM® 550-L Product Availability**

Standard Product Sizes	
Normal Thickness in (mm)	1/16, 1/8, 1/4 (1.60, 3.20, 6.35)
Stand Widths in (mm)	12, 24, 36, 48 (305, 610, 915, 1220)
Custom Widths in (m)	< 72 (< 1.8)

Note: All product data is nominal and does not represent a specification.

All data and statements concerning these products may be considered as being indicative of representative properties and characteristics obtainable. We make no warranty, expressed or implied, concerning actual use or results because of industry specific influences.

**Applications**

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

**Testing/Engineering Services**

- Thermal imaging for performance validation
- Thermal conductivity for material characterization
- Thermal modeling for engineering solutions

As with all high temperature papers using organic binder systems, a small amount of organic material will burn out starting around 300°F (149°C). Ensure adequate ventilation is in place during initial heating. Lydall also offers a complete line of inorganic high temperature insulation papers.

For outstanding thermal barriers at high temperature, trust Lydall LyTherm® series

