



Designed to Take the Heat

Non-Respirable Fiber Paper *Contains No Asbestos*

LDF Paper

LDF PAPER is a light weight insulation material processed from high temperature, non-respirable fibers formed into a highly flexible sheet. It is recommended for continuous use at temperatures up to 760°C (1400°F). **LDF PAPER** is processed from quasi continuous, non-respirable fibers and therefore offers very low thermal conductivity due to its low content of unfiberized material. It is designed for use in applications requiring an alternative to man-made vitreous blown or spun fibers products.

LDF 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.

LDF PAPER is used in automotive, appliance and consumer equipment industries. If it becomes wet due to water, steam or oil, its physical and thermal properties will return upon drying. It contains no water of combination.

Advantages

- ▲ Easy to cut, wrap, or form
- ▲ Temperature stability
- ▲ Low thermal conductivity
- ▲ Low heat storage
- ▲ Resilient
- ▲ Non-irritating
- ▲ Lightweight
- ▲ Thermal shock resistance
- ▲ High heat reflectance
- ▲ High tensile strength
- ▲ Excellent corrosion resistance

Typical Applications

- ▲ Alternative to RCF papers
- ▲ High temperature gaskets and seals
- ▲ High temperature expansion joint packing
- ▲ Molten metal filter gaskets
- ▲ Back-up linings for laboratory furnaces
- ▲ Automotive heat shield insulation
- ▲ Sound absorption
- ▲ Appliance insulation
- ▲ Linings for molds and troughs for molten metal



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| TECHNICAL DATA | | | | | |
|--|---|--|---------------------|--|---------------------|
| | UNIT | 1/16" | 1/8" | 1/4" | 3/8" |
| Melting Point | °C (°F) | 850 (1550) | 850 (1550) | 850 (1550) | 850 (1550) |
| Maximum Use Temperature | °C (°F) | 815 (1500) | 815 (1500) | 815 (1500) | 815 (1500) |
| Typical Chemical Analysis | % Al ₂ O ₃ | 14.8 | 14.8 | 14.8 | 14.8 |
| | % SiO ₂ | 54.3 | 54.3 | 54.3 | 54.3 |
| | % CaO | 17.4 | 17.4 | 17.4 | 17.4 |
| | % MgO | 4.9 | 4.9 | 4.9 | 4.9 |
| | % Others | 8.6 | 8.6 | 8.6 | 8.6 |
| Organic Content | % | 7 | 7 | 7 | 7 |
| Density uncompressed | lbs/ft ³ (kg/m ³) | 5 - 7 (80 - 112) | 5 - 7 (80 - 112) | 5 - 7 (80 - 112) | 5 - 7 (80 - 112) |
| Nominal Coverage | ft ² /lb (m ² /kg) | 32 (6.54) | 16 (3.27) | 8 (1.64) | 4 (0.82) |
| Tensile Strength | - machine direction | 8.14 (2185) | 16.1 (4311) | 26.4 (7087) | 37.5 (10069) |
| | - cross direction | 7.48 (2008) | 12.1 (3248) | 21.7 (5817) | 30.8 (8268) |
| Nominal Thickness Uncompressed | inch (mm) | 1/16 (1.6) | 1/8 (3.2) | 1/4 (6.4) | 3/8 (9.5) |
| Thermal Conductivity | | Mean Temperature °F (°C) 400 (204) 800 (427) 1200 (650) 1450 (788) | | Thermal Conductivity BTU.in/sf.h.°F (W/m.°K) 0.33 (0.048) 0.60 (0.085) 1.05 (0.150) 1.46 (0.210) | |
| THERMAL CONDUCTIVITY (DIN 51046) | | | | | |
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