



Characteristics

- ▶ Low thermal conductivity
- ▶ Will not burn or smolder
- ▶ Will not stretch or shrink
- ▶ 1500°F service temperature
- ▶ High strength-to-weight ratio
- ▶ Resistant to molten metals
- ▶ High dielectric strength/low constants
- ▶ Resistant to most chemicals
- ▶ Excellent flexibility up to 1500°F

Chemical Composition

"E" FIBERGLASS COMPOSITION

| | |
|------------------|----------|
| Silicone Dioxide | 52 - 56% |
| Calcium Oxide | 16 - 25% |
| Aluminum Oxide | 10 - 12% |
| Boron Oxide | 8 - 12% |
| Magnesium Oxide | 0 - 6% |
| Sodium Oxide | 0 - 1% |
| Potassium Oxide | 0 - 1% |

VERMICULITE COMPOSITION

| | |
|------------------|-------------|
| Silicone Dioxide | 38 - 46% |
| Magnesium Oxide | 16 - 24% |
| Aluminum Oxide | 11 - 16% |
| Ferric Oxide | 8 - 13% |
| Potassium Oxide | 4 - 6% |
| Calcium Oxide | 4 - 6% |
| Titanium Oxide | 1 - 3% |
| Manganese Oxide | 1 - 2% |
| Chromium Oxide | 0.05 - 0.2% |
| Sodium Oxide | 0.1 - 0.3% |
| Others | <0.5% |

Typical Vermiculite Applications

- ▶ Cryogenic or high-temperature insulation
- ▶ Chemical absorbent
- ▶ Acoustical absorbent
- ▶ Available as cloth, tape, sleeving, or rope

Exothermic fiberglass textiles are coated with a magnesium-aluminum-silicate mineral suspended in a water base. This chemical dispersion increases the fire and temperature resistance normally found in glass fibers. The platelets in the dispersion encapsulate the fibers in a protective film which reduces abrasion as well.

Thermostatic Industries, Inc. (800) 345-4217

Fax: (213) 749-2646 E-mail: thermo@thermostatic.com

Website: <http://www.thermostatic.com>