

PERMATECH® Foam Insulation

R-745

R-745 foam insulation provides a non-wetting safety zone to stop molten aluminum should it escape the primary refractory before it reaches the steel superstructure of the metal-containing vessel. The two-component foam expands as it sets, and flows into every available space to eliminate voids.

- The flow characteristics of R-745 make the slurry easy to pour or pump. Once dried, R-745 provides an extremely low density refractory barrier: 36lbs. per cubic foot.
- Maximum use temperature is 2000°F. R-745 applications include insulating behind brick and monolithic refractories in filter and degassing vessels as well as casting tables.
- R-745 contains alumina, calcium aluminates cement and dispersing agents. R-745 is supplied dry, and is mixed to form a slurry.

PERMATECH® ADVANTAGE

Chemical Analysis

Al ₂ O ₃	90.8%
CaO	3.2%
Others	6.0%

Bulk Density

36 PCF (576 Kg/M³) after dried
44PCF (705Kg/M³) as poured (after foamed)

Thermal Conductivity

Mean Temp.	BTU/Ft ² /Hr/ln/°F	Kcal/M/Hr/°C
400° F (205°C)	0.85	0.11
800° F (420°C)	0.75	0.09
1200°F (650°C)	0.65	0.08

Maximum Use Temperature

Suitable for maximum 2600°F (1427°C)

Molten Aluminum Testing

72 Hour Cup Test / 7075 Alloy / 1500°F (816°C)
Metal skull easily removed upon cooling, no penetration
Rating: **EXCELLENT**

ENGINEERED FOR
MAXIMUM PRODUCTIVITY

PERMATECH®
SHAPING THE FUTURE OF REFRACTORY TECHNOLOGY