

## Zircar Refractory Composites ZIRCAL-18 Refractory Board

Category : Ceramic

### Material Notes:

Type ZIRCAL-18 Refractory Board is a high temperature calcium silicate block insulation with excellent mechanical properties and stability up to 1100°C(2000°F). Its high thermal insulating value makes it ideal for many fireproofing and heat processing equipment applications. ZIRCAL-18 is designed to serve as a backup insulation for any refractory construction, such as insulating fire brick, dense refractory brick, castable, gunning mix, plastic refractory or ceramic fiber. Information provided by ZIRCAR Refractory Composites, Inc. (ZRCI)

Order this product through the following link:

[http://www.lookpolymers.com/polymer\\_Zircar-Refractory-Composites-ZIRCAL-18-Refractory-Board.php](http://www.lookpolymers.com/polymer_Zircar-Refractory-Composites-ZIRCAL-18-Refractory-Board.php)

Physical Properties	Metric	English	Comments
Density	0.280 g/cc	0.0101 lb/in <sup>3</sup>	
Loss On Ignition	5.5 %	5.5 %	

Mechanical Properties	Metric	English	Comments
Modulus of Rupture	0.00110 GPa	0.160 ksi	parallel to thickness
Compressive Yield Strength	1.40 MPa	203 psi	at 5% deformation, parallel to thickness

Thermal Properties	Metric	English	Comments
CTE, linear	3.10 μm/m-°C	1.72 μin/in-°F	
	@Temperature 20.0 - 700 °C	@Temperature 68.0 - 1290 °F	
Thermal Conductivity	5.50 μm/m-°C	3.06 μin/in-°F	
	@Temperature 20.0 °C	@Temperature 68.0 °F	
Thermal Conductivity	0.0700 W/m-K	0.486 BTU-in/hr-ft <sup>2</sup> -°F	parallel to thickness
	@Temperature 200 °C	@Temperature 392 °F	
Thermal Conductivity	0.0900 W/m-K	0.625 BTU-in/hr-ft <sup>2</sup> -°F	parallel to thickness
	@Temperature 400 °C	@Temperature 752 °F	
Thermal Conductivity	0.100 W/m-K	0.694 BTU-in/hr-ft <sup>2</sup> -°F	parallel to thickness
	@Temperature 600 °C	@Temperature 1110 °F	
Maximum Service Temperature, Air	1100 °C	2010 °F	
Shrinkage	0.000 %	0.000 %	Linear reheat (perpendicular to thickness)
	@Temperature 650 °C, Time 43200 sec	@Temperature 1200 °F, Time 12.0 hour	

Thermal Properties	Metric	English	Comments
	@Temperature 1050 °C, Time 43200 sec	@Temperature 1920 °F, Time 12.0 hour	Linear reheat (perpendicular to thickness)

Component Elements Properties	Metric	English	Comments
Other	1.5 %	1.5 %	

Descriptive Properties	Value	Comments
CaSiO3, %	93	

## Contact Songhan Plastic Technology Co.,Ltd.

Website : [www.lookpolymers.com](http://www.lookpolymers.com)

Email : [sales@lookpolymers.com](mailto:sales@lookpolymers.com)

Tel : +86 021-51131842

Mobile : +86 13061808058

Skype : lookpolymers

Address : United North Road 215,Fengxian District, Shanghai City,China