

Zircar Ceramics AL-30AAH Alumina Insulation

Category : Ceramic , Oxide , Aluminum Oxide

Material Notes:

AL-30AAH was developed for use in copper vapor lasers where the ultimate in low mass alumina purity is required. Information provided by Zircar Ceramics.

Order this product through the following link:

http://www.lookpolymers.com/polymer_Zircar-Ceramics-AL-30AAH-Alumina-Insulation.php

Physical Properties	Metric	English	Comments
Density	0.510 g/cc	0.0184 lb/in ³	
Open Porosity	84 %	84 %	

Thermal Properties	Metric	English	Comments
CTE, linear	7.50 $\mu\text{m/m-}^{\circ}\text{C}$	4.17 $\mu\text{in/in-}^{\circ}\text{F}$	
	@Temperature 20.0 - 1000 $^{\circ}\text{C}$	@Temperature 68.0 - 1830 $^{\circ}\text{F}$	
Specific Heat Capacity	1.05 J/g- $^{\circ}\text{C}$	0.250 BTU/lb- $^{\circ}\text{F}$	
Thermal Conductivity	0.0900 W/m-K	0.625 BTU-in/hr-ft ² - $^{\circ}\text{F}$	parallel to thickness; ASTM C177-76
	@Temperature 250 $^{\circ}\text{C}$	@Temperature 482 $^{\circ}\text{F}$	
	0.120 W/m-K	0.833 BTU-in/hr-ft ² - $^{\circ}\text{F}$	parallel to thickness; ASTM C177-76
	@Temperature 525 $^{\circ}\text{C}$	@Temperature 977 $^{\circ}\text{F}$	
	0.160 W/m-K	1.11 BTU-in/hr-ft ² - $^{\circ}\text{F}$	parallel to thickness; ASTM C177-76
	@Temperature 800 $^{\circ}\text{C}$	@Temperature 1470 $^{\circ}\text{F}$	
	0.190 W/m-K	1.32 BTU-in/hr-ft ² - $^{\circ}\text{F}$	parallel to thickness; ASTM C177-76
	@Temperature 1075 $^{\circ}\text{C}$	@Temperature 1967 $^{\circ}\text{F}$	
	0.230 W/m-K	1.60 BTU-in/hr-ft ² - $^{\circ}\text{F}$	parallel to thickness; ASTM C177-76
	@Temperature 1350 $^{\circ}\text{C}$	@Temperature 2460 $^{\circ}\text{F}$	
	0.270 W/m-K	1.87 BTU-in/hr-ft ² - $^{\circ}\text{F}$	parallel to thickness; ASTM C177-76
	@Temperature 1650 $^{\circ}\text{C}$	@Temperature 3000 $^{\circ}\text{F}$	
Melting Point	1870 $^{\circ}\text{C}$	3400 $^{\circ}\text{F}$	
Maximum Service Temperature, Air	1700 $^{\circ}\text{C}$	3090 $^{\circ}\text{F}$	
Shrinkage	0.200 %	0.200 %	Length
	@Temperature 1650 $^{\circ}\text{C}$,	@Temperature 3000 $^{\circ}\text{F}$,	

Thermal Properties	Time 3600 sec Metric	Time 1.00 hour English	Comments
	0.600 %	0.600 %	
	@Temperature 1650 °C, Time 3600 sec	@Temperature 3000 °F, Time 1.00 hour	Width
	1.00 %	1.00 %	
	@Temperature 1650 °C, Time 3600 sec	@Temperature 3000 °F, Time 1.00 hour	Volume

Component Elements Properties	Metric	English	Comments
Al2O3	98.4 %	98.4 %	
CaO	0.020 %	0.020 %	
Na2O	0.030 %	0.030 %	
Other	0.040 %	0.040 %	Other Metal Oxides
SiO2	1.6 %	1.6 %	

Descriptive Properties	Value	Comments
Bond	Alumina	
Color	White	

Contact Songhan Plastic Technology Co.,Ltd.

Website : www.lookpolymers.com

Email : sales@lookpolymers.com

Tel : +86 021-51131842

Mobile : +86 13061808058

Skype : lookpolymers

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