

Osprey Metals CE7 Al-Si Controlled Expansion Alloy

Category : Metal , Nonferrous Metal

Material Notes:

Si-30%Al controlled expansion alloy manufactured and patented by Osprey Metals Ltd. Information provided to MatWeb by Osprey Metals.

Order this product through the following link:

http://www.lookpolymers.com/polymer_Osprey-Metals-CE7-Al-Si-Controlled-Expansion-Alloy.php

Mechanical Properties	Metric	English	Comments
Hardness, Vickers	255	255	
Tensile Strength, Ultimate	100 MPa	14500 psi	
Modulus of Elasticity	125 GPa	18100 ksi	
Flexural Strength	143 MPa	20700 psi	Three Point Bend
Poissons Ratio	0.25	0.25	
Fracture Toughness	6.00 MPa-m ^{1/2}	5.46 ksi-in ^{1/2}	
Shear Modulus	50.0 GPa	7250 ksi	Calculated

Thermal Properties	Metric	English	Comments
CTE, linear	7.70 μm/m-°C	4.28 μin/in-°F	
	@Temperature 25.0 - 500 °C	@Temperature 77.0 - 932 °F	
	7.80 μm/m-°C	4.33 μin/in-°F	
	@Temperature 25.0 - 100 °C	@Temperature 77.0 - 212 °F	
	8.30 μm/m-°C	4.61 μin/in-°F	
	@Temperature 25.0 - 200 °C	@Temperature 77.0 - 392 °F	
	8.50 μm/m-°C	4.72 μin/in-°F	
	@Temperature 25.0 - 300 °C	@Temperature 77.0 - 572 °F	
Specific Heat Capacity	0.750 J/g-°C	0.179 BTU/lb-°F	
Thermal Conductivity	100 W/m-K	694 BTU-in/hr-ft ² -°F	
	@Temperature 200 °C	@Temperature 392 °F	
	120 W/m-K	833 BTU-in/hr-ft ² -°F	
	@Temperature 25.0 °C	@Temperature 77.0 °F	

Component Elements Properties	Metric	English	Comments
Aluminum, Al	30 %	30 %	
Silicon, Si	70 %	70 %	

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