

Alcoa Deltalloy® 4032-T86 Aluminum

Category : Metal , Nonferrous Metal , Aluminum Alloy , 4000 Series Aluminum Alloy

Material Notes:

Weldability = B; Stress Corrosion Cracking Resistance = B; General Corrosion Resistance = C (A = best; E = worst). General 4032 characteristics and uses: Good machinability and drilling characteristics when using single point or multi-spindle screw machines. Excellent surface finish using polycrystalline or carbide tooling. Superior wear resistance, eliminated the need for hard coat anodizing. High strength, low thermal expansion. Uses: Master brake cylinders, transmission valves, copier parts, bushings for rack and pinion steering systems, sound recording devices, bearings and hydraulic applications, forged pistons. Data supplied by the manufacturer, Alcoa.

Order this product through the following link:

http://www.lookpolymers.com/polymer_Alcoa-Deltalloy-4032-T86-Aluminum.php

Physical Properties	Metric	English	Comments
Density	2.68 g/cc	0.0968 lb/in ³	

Mechanical Properties	Metric	English	Comments
Hardness, Brinell	120	120	500 kg load/10 mm ball
Hardness, Knoop	150	150	Estimated from Brinell
Hardness, Rockwell A	46.8	46.8	Estimated from Brinell
Hardness, Rockwell B	75	75	Estimated from Brinell
Hardness, Vickers	136	136	Estimated from Brinell
Tensile Strength, Ultimate	>= 365 MPa	>= 52900 psi	
Tensile Strength, Yield	>= 338 MPa	>= 49000 psi	
Elongation at Break	5.0 %	5.0 %	
Modulus of Elasticity	79.0 GPa	11500 ksi	
Machinability	70 %	70 %	0-100 Scale (A=90; B=70; C=50; D=30; E=10)
Shear Strength	218 MPa	31600 psi	Calculated

Thermal Properties	Metric	English	Comments
CTE, linear	19.4 µm/m-°C	10.8 µin/in-°F	average
	@Temperature 20.0 - 100 °C	@Temperature 68.0 - 212 °F	
Thermal Conductivity	138 W/m-K	958 BTU-in/hr-ft ² -°F	

Component Elements Properties	Metric	English	Comments
Aluminum, Al	85 %	85 %	
Chromium, Cr	<= 0.10 %	<= 0.10 %	
Copper, Cu	0.50 - 1.3 %	0.50 - 1.3 %	
Iron, Fe	<= 1.0 %	<= 1.0 %	
Magnesium, Mg	0.80 - 1.3 %	0.80 - 1.3 %	
Nickel, Ni	0.50 - 1.3 %	0.50 - 1.3 %	
Silicon, Si	11 - 13.5 %	11 - 13.5 %	
Zinc, Zn	<= 0.25 %	<= 0.25 %	

Electrical Properties	Metric	English	Comments
Electrical Resistivity	0.00000490 ohm-cm	0.00000490 ohm-cm	

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