



Additive Metal Alloys, Ltd  
 427 west Dussel, #105  
 Maumee, Ohio 43537  
 800.687.6110 Phone  
 419.865.9919 Fax  
 additivemetalalloys.com  
 sales@additivemetalalloys.com

## AM Si12 Data sheet

AM Si12 has many outstanding attributes that lead to a wide range of applications. It demonstrates good corrosion and oxidation resistance, as well as, high electrical and thermal conductivity. AM Si12 has a low density, high ductility and reasonably high strength, all at a relatively low cost.

### Alloy Highlights

- Low Density
- Good Corrosion Resistance
- Good Oxidation Resistance
- Good Electrical Conductivity
- Good Thermal Conductivity
- High Ductility

Mechanical Properties (as Sintered)	
Test	Vertical
Tensile Strength	46 +/-1 ksi
Yield Strength	35 +/-5 ksi
Elongation at break	2.5 +/- 0.5%
Hardness	110 HV
Density (lb/in <sup>3</sup> )	0.097

Chemistry		
Element	Range (%)	
	Min	Max
Al	Balance	
Al Oxide		0.08
Cu		0.30
Fe		0.80
Mg		0.15
Mn		0.15
Si	11	13
Zn		0.20
Other, Each		0.05
Others, Total		0.15

### Typical Applications

- Automotive
- Aerospace
- Consumer goods

### Applicable Chemistry Specifications

UNS 49047      DIN 3.2852