

ANEXO

PROPRIEDADES DA LIGA AA3104-H19

MatWeb.com, The Online Materials Database

Aluminum 3104-H19

Subcategory: 3000 Series Aluminum Alloy; Aluminum Alloy; Metal; Nonferrous Metal

Close Analogs:

Composition Notes:

Aluminum content reported is calculated as remainder.

Composition information provided by the Aluminum Association and is not for design.

Key Words: UNS A93104; Aluminium 3104-H19; AA3104-H19

Component	Wt. %	Component	Wt. %	Component	Wt. %
Al	95 - 98.4	Mg	0.8 - 1.3	Si	Max 0.6
Cu	0.05 - 0.25	Mn	0.8 - 1.4	Ti	Max 0.1
Fe	Max 0.8	Other, each	Max 0.05	V	Max 0.05
Ga	Max 0.05	Other, total	Max 0.15	Zn	Max 0.25

Material Notes:

Data points with the AA note have been provided by the Aluminum Association, Inc. and are NOT FOR DESIGN.

Physical Properties	Me- tric	English	Comments
Density			2.72 g/cc AA; Typical
Mechanical Properties		0.0983 lb/in ³	
Hardness, Brinell	78		
Hardness, Knoop	101	78	500 kg load with 10 mm ball. Calculated value.
Hardness, Vickers	88	101	Converted from Brinell Hardness Value
Tensile Strength, Ultimate	290 MPa	88	Converted from Brinell Hardness Value
Tensile Strength, Yield	260 MPa	42100 psi	
Elongation at Break	4 %	37700 psi	
Modulus of Elasticity	69 GPa	4 %	In 5 cm; Sample 1.6 mm thick
Poisson's Ratio	0.34	10000 ksi	Average of Tension and Compression. In Aluminum alloys, the compressive modulus is typically 2% greater than the tensile modulus. Estimated from trends in similar Al alloys.
Shear Mo- dulus	26 GPa	0.34	Estimated from trends in similar Al alloys.
Shear S- trength	175 MPa	3770 ksi	Estimated from similar Al alloys.

Copyright 1996-2004 by Automation Creations, Inc.