

Material data sheet

AA 6064A Pb max. 0.4 % Low-lead free-cutting quality

Compliance with the requirements of the EU directives RoHS 2011/65/EU and ELV 2000/53/EC

1) Chemical composition according to DIN EN 573-3 [% by mass, remainder Al]

%	Si	Fe	Cu	Mn	Mg	Cr	Ni	Zn	Ti	Bi	Pb	Each
min.	0.40	-	0.15	-	0.8	0.04	-	-	-	0.40	0.20	-
max.	0.8	0.7	0.40	0.15	1.2	0.14	-	0.25	0.15	0.8	0.40	0.15

2) Mechanical properties

Temper	Dimensions in mm		R _m Mpa		R _{p0,2}		A% min.	A _{5mm} %	HBW
	D ^a	S ^b	min.	max.	min.	max.	min.	min.	Typical value
T6	≤80	-	290	-	240	-	-	10	ns
T8	≤50	-	345	-	315	-	-	4	ns
T9	≤28	-	360	-	330	-	-	4	ns
T6	≤200	-	260	-	240	-	-	10	ns

D^a = Diameter for round rod / S^b = Width across flat for square and hexagonal rod, Thickness for rectangular rod / c Properties may be obtained by press quenching.

Classification: 1=very good / 6=insufficient

Physical properties		General properties	
Density g/cm ³	2.75	<ul style="list-style-type: none"> • Good machinability with short chip formation and limited tool wear (similar to AA6012 and AA6262) • Mechanical properties similar to AA6012 and AA6262 • Good mechanical properties, highest strength in the temper T9, low residual stresses in the tempers T8 and T6 • Smooth surface after machining, grinding and polishing • Good anodising and hard-coating properties (comparable with AA6061 and AA6262) • Good corrosion resistance (comparable with AA6061 and AA6262) 	
Modulus of elasticity MPa	70000		
Thermal conductivity W/(m K)	170-220		
Coefficient of thermal expansion (20-100 °) 10 ⁻⁶ /K	23.4		
Electrical conductivity MS/m	24-32		
Application field			
<ul style="list-style-type: none"> • Manufacture of turned parts on multi-spindle automatic lathes with better corrosion than AA2011 • AA6064A is a more environmentally friendly alternative to the free-cutting alloys AA6262/AA6012 and AA6018. 			

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