

STEP/G

## AA6064A

## DATA SHEET

## GENERAL PROPERTIES

- Good machinability with small chips and limited tool wear (similar to AA6012/AlMg1SiPb and AA6262/AlMgSiPb).
- Mechanical properties similar to AA6012/AlMgSiPb and AA6262/AlMg1SiPb.
- Medium mechanical strength. Highest strength in T9. Lower internal stresses in T8 and T6 temper.
- Excellent surface finish after machining, grinding and/or polishing.
- Pb ≤ 0.4%.
- 100% Tin free.
- Excellent hard, bright or colour anodizing properties (similar to AA6061/AlMg1SiC and AA6262/AlMg1SiPb).
- Good corrosion resistance (similar to AA6061/AlMg1SiCu and AA6262/AlMg 1SiPb).
- Anodized parts can be exposed to brake fluid at elevated temperatures and containing water.

## PHYSICAL PROPERTIES

- Modulus of elasticity: 70GPa
- Specific weight: 2.75 kg/dm<sup>3</sup>
- Thermal conductivity (25°C): 170 – 220 W/mK
- Thermal expansion (20 – 100°C): ± 23.4 µm/mK
- Electrical conductivity (20°C): 24 – 32 MS/m

## CHEMICAL COMPOSITION

%	Si	Fe	Cu	Mn	Mg	Cr	Zn	Ti	Bi	Pb	each	total
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	0.05	0.15

## SANKYO TATEYAMA EUROPE PRODUCTION POSSIBILITIES

- ROUND, SQUARE AND FLAT BARS  
CIRCUMSCRIBED CIRCLE  
EXTRUDED: 9 – 220 mm  
DRAWN: 9 – 120 mm
- SOLID SECTIONS
- ALL TEMPER AND STANDARDS
- INDIRECT/DIRECT EXTRUSION
- HEAT TREATMENT
- DRAWING, STRAIGHTENING & CHAMFERING
- STRESS RELIEVING
- ANNEALING & AGEING
- ULTRASONIC & EDDY CURRENT INSPECTION

## APPLICATION

- Machining of aluminium parts on multi spindle lathe requiring corrosion resistance superior to AA2011/AlCu6BiPb (i.e. brake pistons, fittings, valve components, automotive parts, ...).
- AA6064A is an environmentally-friendlier alternative to machining alloys like AA6262, AA6012/AlMgSiPb or AA6018.
- Pb-free according to the EC Directive 2000/53/EC on end-of-life vehicles and the EC Directive 2002/95/EC (RoHS) for electrical equipment.

## MECHANICAL PROPERTIES

Temper	Dimension [mm]	R <sub>m</sub> [MPa]	R <sub>p0.2</sub> [MPa]	A5 [%]
T9	≤ 50	≥ 360	≥ 330	≥ 4
T8	≤ 50	≥ 345	≥ 315	≥ 4
T6	≤ 200	≥ 260	≥ 240	≥ 10

Minimum values can be optimised according to product requirements.

T3 – solution heat treated, cold worked and naturally aged

T8 – solution heat treated, cold worked and artificially aged

T6 – solution heat treated and artificially aged