

STEP/G

AlEco™ 62Sn

DATA SHEET

GENERAL PROPERTIES

- Mechanical properties equivalent to AA6262.
- Medium mechanical strength. Highest strength in T9. Lower internal stresses in T8 and T6.
- Excellent machinability with small chips and limited tool wear (Grade A, slightly better than AA6262 and similar to AA2011).
- Excellent surface finish after machining, grinding and/or polishing.
- 100% Lead-free, i.e. lead is not introduced intentionally and is only present as an impurity.
- Good hard anodizing properties (similar to AA6061).
- Good corrosion resistance (similar to AA6061 and better than AA2011).
- Brake fluid with water can attack anodized parts at a temperature above 140°C.

PHYSICAL PROPERTIES

- Modulus of elasticity: 10.10³ ksi
- Specific weight: 0.098 lb/in³
- Thermal conductivity (77F): 1190 btu-in/ft²hrF
- Thermal expansion (68-212F): ± 13.0 µin/inF
- Electrical conductivity (68F): 44% IACS

CHEMICAL COMPOSITION

AlEco62Sn is registered at the Aluminium Association with the alloy designation 6262A.

%	Si	Fe	Cu	Mn	Mg	Cr	Zn	Ti	Bi	Sn	each	total
min	0.40	-	0.15	-	0.8	0.04	-	-	0.40	0.40	-	-
max	0.8	0.7	0.40	0.15	1.2	0.14	0.25	0.10	0.9	1.0	0.05	0.15

APPLICATION

- Machining of aluminium parts on multi spindle lathe (i.e. fittings, gears, bearings, nozzles, valve components, hydraulic parts, ...).
- AlEco62Sn is a 100% lead free and environmentally-friendly alternative to machining alloys like AA6262, AA6012, AA6018, AA2030/2007.
- According to the EC Directive 2000/53/EC on end-of-life vehicles and the Directive 2002/95/EC on waste electrical equipment.

MECHANICAL PROPERTIES

Temper		R _m [ksi]	R _{p0.2} [ksi]	A5 (5D) [%]	Hardness [HB]
T9	typical*	57	56	7	100
	minimum	52	48	4	
T8	typical*	55	51	10	99
	minimum	50	46	4	
T6	typical*	53	47	12	95
	minimum	42	35	10	

* Typical values refer to rods between Ø 0,55mm and Ø 1,6 mm at room temperature and should not be used for design purposes. Minimum values can be optimized according to product requirements.

SANKYO TATEYAMA EUROPE PRODUCTION POSSIBILITIES

- ROUND, SQUARE AND FLAT BARS
CIRCUMSCRIBED CIRCLE
EXTRUDED: 0.35 – 8.66 in.
DRAWN: 0.35 – 4.72 in.
- SOLID SECTIONS
- ALL TEMPERS AND STANDARDS
- INDIRECT/DIRECT EXTRUSION
- HEAT TREATMENT
- DRAWING, STRAIGHTENING & CHAMFERING
- STRESS RELIEVING
- ANNEALING & AGEING
- ULTRASONIC & EDDY CURRENT INSPECTION