

## DATA SHEET

### GENERAL PROPERTIES

- High strength and excellent machinability
- Optimal grain structure and strength in T6
- Better anodizing properties compared to EN AW 7175 (mainly lower Cu content)
- Corresponds to the EC Directive 2000/53/EC on end-of-life vehicles and the EC Directive 2002/95/EC (RoHS) for electrical equipment

### PHYSICAL PROPERTIES

- Modulus of Elasticity: 71.7 GPa
- Density: 2.765 kg/dm<sup>3</sup>
- Thermal conductivity (20°C): 120 - 140 W/m.K
- Thermal expansion (20-100°C):  $\pm 23.6 \mu\text{m/m.K}$
- Electrical conductivity (20°C): 18 - 23 MS/m

### CHEMICAL COMPOSITION

%	Si	Fe	Cu	Mn	Mg	Cr	Zn	Ti+Zr	each	total
min	-	-	0.50	0.10	2.6	0.10	4.3	-	-	-
max	0.50	0.50	1.00	0.40	3.7	0.30	5.2	0.20	0.05	0.15

### APPLICATION

- Products in tooling industry (like blow-moulds for plastic bottles, machine parts, ...) and high strength leisure applications (structural bicycle parts, rifles, ...).

### MECHANICAL PROPERTIES

Temper		R <sub>m</sub> [MPa]	R <sub>p0.2</sub> [MPa]	A5	Hardness [HB]
T6/T6511	typical*	615	575	10	165
	minimum	490	420	7	

Above mentioned typical values should not be used for design purposes. Minimum values can be optimized according to product requirements and heat treatment.

### SANKYO TATEYAMA EUROPE PRODUCTION POSSIBILITIES

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