



Color code  
Grey

## PRODUCTION PROGRAM

Unit: in	●	■	■	◆
Drawn	0.551 - 3	0.787 - 2.559	Thick. 0.472 - 2.165	0.787 - 2.362
Extruded	1.181 - 10	1.969 - 6.5	Thick. 1.181 - 5	-

According to EU directives:  
2000/53/EC (ELV) – 2011/65/EU (RoHS II)



## PRESENTATION

This alloy has high mechanical properties, excellent resistance to fatigue, good attitude to forging and a fair machinability.

**Main applications:** high structural resistance components for aircraft and defense.

Samples of finished products made of Eural bars

Properties	T3/T4/T6
Machinability	■
Protective anodizing	■
Decorative anodizing	■
Hard anodizing	■
Resistance to atmospheric corrosion	■
Resistance to marine corrosion	■
MIG-TIG weldability	■
At resistance weldability	■
Brazing weldability	■
Plastic formability when cold	■
Plastic formability when hot	■

### Legend



Chemical composition	
Si	0.50 - 1.20
Fe	≤ 0.70
Cu	3.90 - 5.00
Mn	0.40 - 1.20
Mg	0.20 - 0.80
Cr	≤ 0.10
Zn	≤ 0.25
Ti	≤ 0.15
Zr + Ti	0.20
Al	Remainder

Physical properties		
Density	$\frac{\text{lb}}{\text{in}^3}$	0.101
Modulus of elasticity	ksi	10,500
Coefficient of thermal expansion	$\frac{\times 10^{-6}}{^{\circ}\text{F}}$	12.8
Thermal conductivity at 68 °F	$\frac{\text{Btu}}{\text{ft h } ^{\circ}\text{F}}$	T4: 77.4 T6: 89.5
Electrical resistivity at 68 °F	$\frac{\Omega \text{ mm}^2}{\text{m}}$	T4: 0.051 T6: 0.043

Mechanical properties *					
	Temper	Rm MPa	Rp 0,2 MPa	A%	HBW
Extruded	T4	56.6	36.3	10	-
	T4511				
	T6	67.4	60.9	7	-
Drawn	T6511	55.1	42.1	8	-
	T3				
	T351	55.1	42.1	6	-
	T4	55.1	31.9	12	-
	T451	55.1	31.9	10	-
T6	65.3	55.1	8	-	
T651	65.3	55.1	6	-	

\* According to EN standards