

# Material data sheet

## EN AW-6262A [AlMg1SiSn] Unleaded 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	Zn	Ti	Bi	Sn	Each	Total
<b>min.</b>	0.40	-	0.15	-	0.8		0.04	-	-	0.40	0.40	-	-
<b>max.</b>	0.8	0.7	0.40	0.15	1.2		0.14	0.25	0.10	0.9	1.0	0.05	0.15

### 2 ) Mechanical properties according to DIN EN 754-2 drawn / DIN EN 755-2 extruded

Temper	Dimensions in mm		R <sub>m</sub> MPa		R <sub>p0.2</sub> MPa		A% min.	A <sub>50mm</sub> %	HBW
	D <sup>a</sup>	S <sup>b</sup>	min.	max.	min.	max.	min.	min.	Typical value
<b>T6<sup>c</sup></b>	≤ 220	≤ 85	290	-	240	-	10	8	-
<b>T8<sup>c</sup></b>	≤ 120	≤ 85	345	-	315	-	4	3	-
<b>T9<sup>c</sup></b>	≤ 120	≤ 85	360	-	330	-	4	3	-

D<sup>a</sup> = Diameter for round rod / S<sup>b</sup> = 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 <sup>3</sup>	2.72	Mechanical properties comparable to AA6262 Highest strength in the temper T9. Low residual stresses in the tempers T8 and T6. Smooth surface after machining, grinding and/or polishing Good hard-coating properties (comparable to AA6061) Good corrosion resistance	
Modulus of elasticity MPa	69000		
Thermal conductivity (25°) W/mK	172		
Coefficient of thermal expansion	23.4		
Electrical conductivity (20°C) MS/m	26		
Weldability		Machining properties	
Gas	6	Excellent machining properties with short chip formation and limited tool wear	
TIG	6		
MIG	6		
Resistance fusion welding	6		

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