Aluminium Alloy EN AW 6026 (AC46) Conforming to ELV(2000/53/EC) and RoHs II (2011/65/EU)

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Alloy 6026 is developed specifically for machining applications, conform to ELV and RoHs and renowned for good machining characteristics and excellent anodizing response. Lead content less then 0,4% and no other prohibited elements is used for automotive brake components, hydraulic valve blocks and many other applications. EN AW 6026 alloy is a direct replacement for 6012 and 6262 -classic, retains all the technological properties of the original 6012 and 6262.

Chemical Composition EN AW 6026 conforming to ELV and RoHs:

Alloy	Si	Fe	Cu	Mn	Mg	Cr	Zn	Ti	Pb	Each	Total	Other
EN AW 6026 EN 573-3	0,6 1,4	max. 0,70	0,20 0,50	0,20 1,0	0,6 1,2	max 0,30	max. 0,30	max. 0,20	max 0,40	max. 0,05	max. 0,15	Bi=0,5-1,50 Sn-max.0,05

Mechanical Properties EN AW 6026 conforming to ELV and RoHs:

Cold Drawn									
Temper EN 754-2	Dimension		Rm min.		$Rp_{0.2}$ min.		A	A (2")	HB min.
	mm	inch (")	MPa	ksi	MPa	ksi	% min.		
T6	5,55 to 76.2	0.218 to 3	370	54	300	44	8	5	95
T8	5.55 to 76.2	0.218 to 3	345	50	315	46	4	5	95
T9	5.55 to 76.2	0.218 to 3	360	52	330	48	4	5	95
Extruded									
Temper EN 755-2	Dimension		Rm min.		$Rp_{0.2}$ min.		A	A (2")	HB min.
	mm	inch (")	MPa	ksi	MPa	ksi	% min.		
T6, T6510, T6511	20 to 140	0.788 to 5.511	370	54	300	44	8	8	95
	140,01 to 180	5.512 to 7.086	340	49	250	36	8	8	90

Comparative Characteristics EN AW 6026 conforming to ELV and RoHs:

Temper	Corrosion resistance		Cold workability	Anodizing Response	Brazeability	Weldability	
	General	Stress				Gas	Arc
T6, T8, T9	B	A	B	A	B	B	B
T6, T6510, T6511	B	A	B	A	B	B	B

Rating: A=Excellent, B=Good, C=Fair, D=Poor

Physical Properties EN AW 6026 conforming to ELV and RoHs:

Density (g/cm^3)	2,73
Modulus of elasticity (MPa)	69640
Thermal conductivity (W/m K)	172
Coefficient of thermal expansion (20-100°) 10^{-6} /K	23,4
Electrical resistivity (MS/m)	26 (45% IASC)

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