

Datasheet:					Internal alloy name: 2017a					
EN AW 2017a Sheet, strip & plate - Aluminium					Chemical Symbol: EN AW-Al Cu4MgSi(A) International alloy name: EN AW-2017a					
Alumeco ApS 19-05-2025					UNS: A92017 DIN-Werkstoff no.: 3.1325 Alloy type: Heat treatable alloy					
Main usage:			Important norms and literature:							
- Machine and high-strength constructions - Fasteners - Aerospace applications - Rivets			General Standards: EN 573-3:2013: Aluminium and aluminium alloys – Chemical composition and form of wrought products – Part 3: Chemical composition and form of products.				Geometric Tolerance: EN 485-3:2005: Aluminium and aluminium alloys – Sheet, strip and plate – Part 3: Tolerances on dimensions and form for hot-rolled products			
Main properties:			Product standards: EN 485-2:2008: Aluminium and aluminium alloys – Sheet, strip and plate – Part 2: Mechanical properties.				EN 485-4:2000: Aluminium and aluminium alloys – Sheet, strip and plate – Part 4: Tolerances on shape and dimensions for cold-rolled products			
- High strength - Good workability - Excellent fatigue resistance										
Chemical composition in %: EN 573-3:2013										
Al	Si	Fe	Cu	Mn	Mg	Cr	Zn	Remarks	Others Max. EachTotal	
Remainder	0,20 – 0,80	Max. 0,7	3,5 – 4,5	0,40 – 1,0	0,40 – 1,0	Max. 0,1	Max. 0,25	0,25 Zr + Ti	0,050,15	
Mechanical properties: EN 485-2:2008										
Temper	Specified thickness <i>t</i> mm	Tensile Stress <i>R_m</i> MPa	Proof Stress <i>R_{p0,2}</i> MPa	Elongation Min. %		Bend radius*				Hardness HBW
				<i>A</i> _{50mm}	<i>A</i>	180°		90°		
O	0,4 ≤ <i>t</i> < 25	Max. 225	Max. 145	12 – 14	12	<i>t</i> mm	bend	<i>t</i> mm	bend	55
T4	0,4 ≤ <i>t</i> < 200	Min. 300 – 390	Min. 200 – 245	13 – 15	2 – 12	0,4 - 6,0	1,5 - 2,0 * <i>t</i>	0,4 - 12,5	0 - 4,0 * <i>t</i>	101 – 110
T451	0,4 ≤ <i>t</i> < 200	Min. 300 – 390	Min. 200 – 245	13 – 15	2 – 12	0,4 - 6,0	3,0 - 5,0 * <i>t</i>	0,4 - 12,5	3,0 - 8,0 * <i>t</i>	101 – 110
T452	150 ≤ <i>t</i> < 200	Min. 300 – 330	Min. 200 – 220	-	2	-	-	-	-	-
T42	0,4 ≤ <i>t</i> < 25	Min. 390	Min. 235	14 - 15	12	-	-	-	-	109
* Thickness depending values										
Physical properties:										
Density	Solidification range	Electrical conductivity	Thermal conductivity	Thermal expansion	Annealing temperature	E - modulus				
g/cm³	°C	%IACS	W/m K	(µm m ⁻¹ K ⁻¹)	°C	(N / mm²)				
2,8	580 – 650	31 – 48	130 – 200	23,0	380 – 420	72500				
Properties and information's (3 high/good; 2 Middle; 1 Poor/bad)										
Resistance: Corrosion index, general: 2 Marine Atm. Corr index: 1 Hot workability: Extrusion: 1 - 2 Forging: 2 Cold formability: Cold formability general: 2 Deep drawing: 2 Bending: 2			Weldability TIG/MIG welding: 1 Resistance welding: 3 Solderability Brazability index: 2 Solderability index: 2 Machinability Machinability index: 2			Anodizing: Decorative anodizing surface treatment: 1 Protective anodizing index: 2 Hard anodizing: 2 Color anodizing: 1				