Datasheet:

EN AW-3005
Coated sheet and strip - Aluminium

Alumeco ApS
19-05-2025

Internal alloy name:	**3005**
Chemical Symbol:	**EN AW-Al Mn1Mg0,5**
International alloy name:	**EN AW-3005**
UNS:	**A93005**
DIN-Werkstoff no.:	**3.0525**
Alloy type:	**-**

Main usage:

- Furniture
- Ladders and rolling shutters
- Heat insulation

Main properties:

- Good mechanical properties
- Good corrosion resistance
- Good workability

Important norms and literature:

General Standards:
EN 573-3:2013: Aluminium and aluminium alloys – Chemical composistion and form of wrought products – Part 3: Chemical composition and form of products.

Product standards:
EN 1396:2015: Aluminium and aluminium alloys – Coil coated sheet and strip for general applications

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

EN 485-4:2000: Aluminium and aluminium alloys – Sheet, strip and plate – Part 4: Tolerances on shape and dimensions for cold-rolled products

Chemical composition in %: EN 573-3:2013

Al	Si	Fe	Cu	Mn	Mg	Cr	Zn	Ti	Others Max.	
									Each	Total
Remainder	Max. 0,6	Max. 0,7	Max. 0,3	1,0 – 1,5	0,20 – 0,6	Max. 0,10	Max. 0,25	Max. 0,10	0,05	0,15

Mechanical properties: EN 1396:2015

Temper	Tensile Stress R_m MPa	Proof Stress $R_{p0,2}$ MPa	A_{50mm} % for specified thickness *t* (mm) Min.		
			$t \leq 0,5$	$0,5 \leq t \leq 1,5$	$t > 1,5$
O	115 – 165	Min. 45	12	14	16
H41	130 – 180	Min. 80	7	8	9
H42	140 – 195	Min. 95	5	5	6
H44	165 – 215	Min. 135	3	3	4

*** Information values only;**

Physical properties:

Density g/cm³	Solidification range °C	Electrical conductivity %IACS	Thermal conductivity W/m K	Thermal expansion (µm m^{-1} K^{-1})	Annealing temperature °C	E - modulus (N / mm²)
2,73	635 – 655	42	160	23,1	-	69500

Properties and information's (3 high/good; 2 Middle; 1 Poor/bad)

Resistance:
Corrosion index, general: 3
Marine Atm. Corr index: 3

Hot workability:
Extrusion: 1
Forging: 1

Cold formability:
Cold formability general: 2
Deep drawing: -
Bending: 2

Weldability: 2

Solderability: 3

Machinability
Machinability index: 1

Anodizing:
Decorative anodizing surface treatment: 3
Protective anodizing index: 3
Hard anodizing: 2
Color anodizing: 2