Data Sheet:

EN AW 6026 – Rods and bars

Alumeco A/S

Internal alloy name:	**6026**
International alloy name :	**EN AW 6026**
Chemical Symbol:	**EN AW – AlSi1MgMn**
DIN-Werkstoff no.:	**N/A**
Alloy type:	**Heat treatable alloy**

Main usage:

- Machining
- Machinery
- Forgings
- Tools
- Heavy duty structures
- Hydraulics systems
- Marine and offshore

Main properties:

- Very good atmospheric corrosion resistance
- Very good workability
- Good machinability
- Heat treatable alloys (Soft T4 temper)

Important norms and literature:

Extrusion:
EN755-1: Technical conditions for inspection and delivery
EN755-2: Mechanical properties
Series EN755-3 to EN755-9: Tolerances on dimensions and forms for different extrusions

Chemical composition:
EN573-3: Chemical composition

Cold drawn profiles:
EN754-1: Technical conditions for inspection and delivery
EN754-2: Mechanical properties
Series EN754-3 to EN754-8: Tolerances on dimensions and forms for different profiles

Chemical composition. EN573-3:2009

Si	Fe	Cu	Mn	Mg	Cr	Pb	Bi	Remarks	Other elements Each	Other elements together
0,60-1,40	0,70	0,20-0,50	0,20-1,0	0,60-1,2	0,30	0,40	0,50-1,5		0,05	0,15

Mechanical properties. EN755 – 2 (Extruded bars)

Thickness range (mm)	Temper	Rm MPa	$Rp_{0,2}$ MPa	A %	Hardness* HB
D ≤ 140	T6	Min. 370	Min. 300	8	95
140 < D ≤ 200	T6	Min. 340	Min. 250	8	90
200 < D ≤ 250	T6	Min. 300	Min. 200	8	90

Mechanical properties. EN754 – 2 (Drawn bars)

Thickness range (mm)	Temper	Rm MPa	$Rp_{0,2}$ MPa	A %	Hardness* HB
D ≤ 80	T6	Min. 370	Min. 300	8	95
D ≤ 80	T8	Min. 345	Min. 315	4	95
D ≤ 80	T9	Min. 360	Min. 330	4	95

* 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	E - modulus (N / mm²)
2,72	575-650	≈44	172	23,4	350°c	69.000

Typical Alumeco products with this alloy

- Bars in various dimensions and form

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

Resistance:
Corrosion index, general: 3
Marine Atm. Corr index: 2

Hot workability:
Extrusion: 3
Forging: 3

Cold formability:
Cold formability general: 2
Deep drawing: 1
Bending: 2 – 3 (Depending on the temper)

Weldability
TIG welding: 2
MIG welding: 2

Solderability
Brazability index: 2
Solderability index: 2

Machinability
Machinability index: 3

Tips on machinability:

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

General Information:
Remove minimum 1 mm surface or more for decorative anodization.