



1 ALUMINIUM ALLOY 5083 / GENERALITA' LEGA 5083

This Datasheet explains the chemical composition and mechanical properties of wrought products made from aluminium alloy.

La presente scheda definisce la composizione chimica della lega e le caratteristiche meccaniche dei semilavorati in lega di alluminio ottenuti da lavorazione plastica.

2 DESIGNATION / DESIGNAZIONE

- Conventional designation: **Al Mg4,5Mn0,7**
Designazione convenzionale
- Numerical designation: **5083**
Designazione numerica

3 CHEMICAL COMPOSITION / COMPOSIZIONE CHIMICA – EN 573-3

Chemical composition %	Si	Fe	Cu	Mn	Mg	Cr	Ni	Zn	Ti	Others	
										Each	Total
5083	0.40 max	0.40 max	0.10 max	0.40 1.0	4.0 4.9	0.05 0.25	-	0.25 max	0.15 max	0.05 max	0.15 max

4 MECHANICAL PROPERTIES (indicative min values) / C. MECCANICHE

Product	Tempers	Dimensions [mm]		Direction Specimen	Rm [N/mm ²]		Rp0.2 [N/mm ²]		A _{50mm} % min	Hardness Typical value HBW
		D	S		min	max	min	max		
Extruded/Estruso EN 755-2	F	D, S ≤ 200		L	270	-	110	-	10	70
		200 < D, S ≤ 250		L	260	-	100	-	-	
	O, H111	D, S ≤ 200		L	270	-	110	-	10	
	H112	D, S ≤ 200		L	270	-	125	-	10	
Drawn/Trafilato EN 754-2	O, H111	D ≤ 80	S ≤ 60	L	270	350	110	-	14	70
	H12, H22, H32	D ≤ 30	-	L	280	-	200	-	4	90

For a complete evaluation, please refer to EN 755-2 (Extruded Product) and EN 754-2 (Drawn Product).

5 PHYSICAL PROPERTIES (indicative values) / CARATTERISTICHE FISICHE

Density	Conducibility % IACS
2.71 g/cm ³	28-30