



HULAMIN

ROLLED PRODUCTS

5086 Data Sheet

Chemical Composition

%	Si	Fe	Cu	Mn	Mg	Cr	Zn	Ti	Others		Aluminium
									Each	Total	
min	-	-	-	0.20	3.5	0.05	-	-	-	-	Remainder
max	0.40	0.50	0.10	0.7	4.5	0.25	0.25	0.15	0.05	0.15	-

Mechanical Properties

Temper	Thickness (mm)	Min. Yield strength (MPa)	UTS, (MPa)	E, (%)	Bending	
					Thickness (mm)	Bend Radius
H116	> 1.60 to 6.30	195	275 - 360	8	3.2	1.5xt
	> 6.30 to 12.50			10	4.8	
	> 12.50 to 50			9	8.0	2.5xt

Physical Properties

Property	Value	Unit
Density at 20°C	2.66	g/cm ³
Approx. Melting range	585-640	°C
Electrical conductivity	18	MS/m
Thermal conductivity at 25°C	126	W/m.K
Thermal expansion coefficient at 20 - 100°C	23.8x10 ⁻⁶	/°C
Modulus of elasticity	71	GPa

Corrosion resistance

Very good. This alloy retains exceptional strength in such extreme environments as seawater and when exposed to industrial chemicals.

Formability

Good

Weldability

Very good. It can be welded by TIG/MIG, with recommended filler alloys being 5183 and 5356.

Applications

Marine, transportation and structural platforms

Certifications

In accordance with AA