青岛鑫百文工贸有限公司
Qingdao BE-WIN Industrial and Trade Co.，Ltd

SAFETY SHEET FOR ANODIZED BRUSHED ALUMINUM SHEET

1 Chemical Component

Alloy	Si	Fe	Cu	Mn	Mg	Cr	Ni	Zn	Ti	Zr	Others		Al
											Single	Total	
6061	0.40-0.8	0.70	0.15-0.40	0.15	0.8-1.2	0.04-0.35	-	0.25	0.15	-	0.05	0.15	Rem
5052	0.25	0.40	0.10	0.10	2.2-2.8	0.15-0.35	-	0.10	-	-	0.05	0.15	Rem
5083	0.40	0.40	0.10	0.40-1.0	4.0-4.9	0.05-0.25	-	0.25	0.15	-	0.05	0.15	Rem
5754	0.40	0.40	0.10	0.50	2.6-3.6	0.30	-	0.20	0.15	-	0.05	0.15	Rem
7075	0.40	0.50	1.2-2.0	0.30	2.1-2.9	0.18-0.28	-	5.1-6.1	0.20	-	0.05	0.15	Rem

2 Mechanical Property

Property	Yield Strength Rp0.2(MPa)	Tensile Strength Rm(MPa)	Elongation A50(%)	HB
6061 T6	≥240	≥290	5-10	80-88
5052 H22 H32	≥130	≥210-260	5-10	61
5083 O H111	≥115	≥270-345	14-16	69-75
5754 H22 H32	≥130	220-270	7-11	63
7075 T6	≥440	≥525	4-8	104-163

3 Surface

Alloy	Surface	Remark
6061	1.More than 400 mesh polishing; 2.Thickness tolerance ±0.05mm; 3.Flatness 0.05mm/㎡	Special technology to control the residual stress to a minimum, greatly reduces the generation of deformation, and greatly reduces the cost of machining for customers.
5052 5083 5754		Special techniques are used to eliminate the residual stress.
7075		Special technology, the product has high hardness and strong bending resistance, far better than any special mild steel.

TESTING RESULT

1. Light and soft. The density of aluminum is about one third of the density of steel. Young's modulus is also about one third of steel.

2. Good strength. The tensile strength of pure aluminum is about 80 mN/m2, which is one fifth of that of mild steel. However, after heat treatment and alloying strengthening, the corresponding strength of low carbon steel can be reached.

3. Good corrosion resistance. One of the characteristics of aluminum alloy is that when exposed to air, the surface will form a dense oxide film, this film can prevent corrosion.

4. Good processability. Easy to regenerate.
Aluminum has a low melting point (660 ℃) and is easy to regenerate.