



MSDS Sheet for Brushed Aluminum

1 Chemical Component:

Alloy No.	Chemical Component %										
	Mg	Si	Fe	Zn	Cu	Cr	Mn	Ti	Others		Al
									Unit	Total	
6063	0.45 ~ 0.9	0.20 ~ 0.6	≤0.3 5	≤0.1 0	≤0.10	≤0.10	≤0.1 0	≤0.1 0	≤0.0 5	≤0.15	Rest
6061	0.8 ~ 1.2	0.40 ~ 0.8	≤0.7	≤0.2 5	0.15 ~ 0.40	0.04 ~ 0.35	≤0.1 5	≤0.1 5	≤0.0 5	≤0.15	Rest

2 Mechanical Property:

Alloy No.	Status	Sample Thickness mm	Tensile Strength Rm MPa	Proof Strength at Non-proportional Extension Rp0.2 MPa	Elongation At Break δ50mm %
6061	T6	≤6.3	265	245	8
		> 6.3	265	245	9
6063	T5	All	160	110	8

3 Physical Property:

Alloy	An Average Thermal Expansion Coefficient ①	Approximately Melting Range ②③	Status	Heat Conductivity at 77°F	Electrical Conductivity at 68°F IACS Percentage		Electrical Resistivity at 68°F
	68 ~ 212°F/°F	°F		UK Unit④	Same QTY	Same Weight	Ω Million/Feet
6061	13.1	1080 ~ 1205	T6	1160	43	142	24
6063	13.0	1140 ~ 1210	T5	1450	55	181	19

Mechanical Property at Room Temperature

Alloy No.	Status		Wall Thickness /mm	Tensile Property				Hardness		
				Tensile Property (Rm)/(N/mm ²)	Proof Strength at Non-proportional Extension(Rp0.2 Mpa)	Percentage Elongation After Fracture / %		Sample Thickness mm	Vickers Hardness HV	Webster Hardness HW
						A	A50 mm			
				Less Than						
6005	T5		≤6.3	260	240	—	8	—	—	—
	T6	Solid Material	≤5	270	225	—	6	—	—	—
			>5~10	260	215	—	6	—	—	—
			>10~25	250	200	8	6	—	—	—
			Hollow Material	≤5	255	215	—	6	—	—
	>5~15	250		200	8	6	—	—	—	
6060	T5		≤5	160	120	—	6	—	—	—
			>5~25	140	100	8	6	—	—	—
	T6		≤3	190	150	—	6	—	—	—
			>3~25	170	140	8	6	—	—	—
6061	T4		All	180	110	16	16	—	—	—
	T6		All	265	245	8	8	—	—	—
6063	T5		All	160	110	8	8	0.8	58	8
	T6		All	205	180	8	8	—	—	—