

ALUMINIUM		CHEMICAL COMPOSITION														MECHANICAL PROPERTIES						
Grade	Former Designation	Silicon	Si%	Iron Fe%	Copper	Cu%	Manganese Mn%	Magnesium Mg%	Chromium Cr%	Nickel Ni%	Zinc Zn%	Tin Sn%	Titanium Ti%	Others	Aluminum Al%	Alloy% Total - Without Al	Charpy "V" Notch ft. lb.	Tensile Strength K.S.I.	Yield Strength K.S.I.	Elong%	Brinell Hardness #	Reduction of Area %
100.1		0.15		0.60 to 0.80	0.10						0.05			0.03 to 0.10	98.94	1.07		20			143-187	
130.1					0.10						0.05			0.03 to 0.10	99.79	0.22		25			159-223	
150.1					0.05						0.05			0.03 to 0.10	99.84	0.17		30			179-229	
160.1		0.10		0.25							0.05			0.03 to 0.10	99.54	0.47		35			187-241	
170.1											0.05			0.03 to 0.10	99.89	0.12		40			197-255	
201.1		0.10		0.15	4.00 to 5.20	0.20 to 0.50	0.15 to 0.55						0.15 to 0.35	0.05 to 0.10	94.25	5.75		45			207-269	
201.2		0.10		0.10	4.00 to 5.20	0.20 to 0.50	0.20 to 0.55						0.15 to 0.35	0.05 to 0.10	94.25	5.75		50			217-269	
A201.0		0.05		0.10	4.00 to 5.00	0.20 to 0.40	0.15 to 0.35						0.15 to 0.35	0.03 to 0.10	94.56	5.44		55			229-269	
A201.1	A201.2	0.05		0.07	4.00 to 5.00	0.20 to 0.40	0.20 to 0.35						0.15 to 0.35	0.03 to 0.10	94.55	5.45		25			131-183	
319.0	319, AllCast	5.50 to 6.50	1.00		3.00 to 4.00	0.50		0.10		0.35	1.00		0.25	0.50	88.65	11.35						
319.1	319, AllCast	5.50 to 6.50	0.80		3.00 to 4.00	0.50		0.10		0.35	1.00		0.25	0.50	88.75	11.25						
319.2	319, AllCast	5.50 to 6.50	0.60		3.00 to 4.00	0.10		0.10		0.10	0.10		0.20	0.20	89.80	10.20						
A319.0		5.50 to 6.50	1.00		3.00 to 4.00	0.50		0.10		0.35	3.00		0.25	0.50	87.65	12.35						
A319.1		5.50 to 6.50	0.80		3.00 to 4.00	0.50		0.10		0.35	3.00		0.25	0.50	87.75	12.25						
B319.0	SAE 329	5.50 to 6.50	1.20		3.00 to 4.00	0.80		0.10 to 0.50		0.50	1.00		0.25	0.50	88.08	11.93						
B319.1		5.50 to 6.50	0.90		3.00 to 4.00	0.80		0.15 to 0.50		0.50	1.00		0.25	0.50	88.20	11.80						
356.0	356	6.50 to 7.50	0.60		0.25	0.35		0.20 to 0.45			0.35		0.25	0.05 to 0.15	91.68	8.33						
356.1	356	6.50 to 7.50	0.50		0.25	0.35		0.25 to 0.45			0.35		0.25	0.05 to 0.15	91.70	8.30						
356.2	356	6.50 to 7.50	0.13 to 0.25		0.10	0.05		0.30 to 0.45			0.05		0.20	0.05 to 0.15	92.14	7.87						
A356.0	A356	6.50 to 7.50	0.20		0.20	0.10		0.25 to 0.45			0.10		0.20	0.05 to 0.15	92.15	7.85						
A356.1		6.50 to 7.50	0.15		0.20	0.10		0.30 to 0.45			0.10		0.20	0.05 to 0.15	92.15	7.85						
A356.2	A356	6.50 to 7.50	0.12		0.10	0.05		0.30 to 0.45			0.05		0.20	0.05 to 0.15	92.27	7.74						
B356.0		6.50 to 7.50	0.09		0.05	0.05		0.25 to 0.45			0.05		0.04 to 0.20	0.05 to 0.15	92.31	7.69						
B356.1		6.50 to 7.50	0.06		0.03	0.03		0.30 to 0.45			0.03		0.04 to 0.20	0.03 to 0.10	92.37	7.64						
C356.0		6.50 to 7.50	0.07		0.05	0.05		0.25 to 0.45			0.05		0.04 to 0.20	0.05 to 0.15	92.32	7.68						
C356.2		6.50 to 7.50	0.04		0.03	0.03		0.30 to 0.45			0.03		0.04 to 0.20	0.03 to 0.10	92.38	7.63						
F356.0		6.50 to 7.50	0.20		0.20	0.10		0.17 to 0.25			0.10		0.04 to 0.20	0.05 to 0.15	92.27	7.73						
F356.2		6.50 to 7.50	0.12		0.10	0.05		0.17 to 0.25			0.05		0.04 to 0.20	0.05 to 0.15	92.41	7.59						
850.0	750	0.70		0.70	0.70 to 1.30	0.10		0.10		0.70 to 1.30		5.50 to 7.00	0.20	0.30	90.70	9.30						
850.1	750	0.70		0.50	0.70 to 1.30	0.10		0.10		0.70 to 1.30		5.50 to 7.00	0.20	0.30	90.80	9.20						
851.0	A850.0 (A750)	2.00 to 3.00	0.70		0.70 to 1.30	0.10		0.10		0.30 to 0.70		5.50 to 7.00	0.20	0.30	89.05	10.95						
851.1	A850.1 (A750)	2.00 to 3.00	0.50		0.70 to 1.30	0.10		0.10		0.30 to 0.70		5.50 to 7.00	0.20	0.30	89.15	10.85						
852.0	A850.0 (B750)	0.40		0.70	1.70 to 2.30	0.10		0.60 to 0.90		0.90 to 1.50		5.50 to 7.00	0.20	0.30	88.95	11.05						
852.1	A850.1 (B750)	0.40		0.50	1.70 to 2.30	0.10		0.70 to 0.90		0.90 to 1.50		5.50 to 7.00	0.20	0.30	89.00	11.00						

SYMBOLS	Al	Aluminum	Fe	Iron
	As	Arsenic	Mg	Magnesium
	B	Boron	Mn	Manganese
	C	Carbon	Mo	Molybdenum
	Cb	Columbium (Niobium)	N	Nitrogen
	Ce	Cerium	Nb	Niobium (now Columbium)
	Co	Cobalt	Ni	Nickel
	Cr	Chromium	P	Phosphorus
	Cu	Copper	Pb	Lead
	Fe	Iron	S	Sulfur
	Mg	Magnesium	Sb	Antimony
	Mn	Manganese	Se	Selenium
	Mo	Molybdenum	Si	Silicon
	N	Nitrogen	Sn	Tin
	Nb	Niobium (now Columbium)	Ta	Tantalum
	Ni	Nickel	Ti	Titanium
	P	Phosphorus	V	Vanadium
	Pb	Lead	W	Tungsten
			Zn	Zinc