

# Alloy 7075

## Chemical Composition Limits

ELEMENT										
WEIGHT %	Cu	Mg	Mn	Si	Fe	Zn	Ti	Cr	Each	Total
MINIMUM	1.20	2.10	–	–	–	5.10	–	0.18	–	–
MAXIMUM	2.00	2.90	0.30	0.40	0.50	6.10	0.20	0.28	0.05	0.15

## Typical Physical Properties

	AVERAGE COEFFICIENT OF THERMAL EXPANSION	MELTING RANGE APPROX.	TEMPER	THERMAL CONDUCTIVITY AT 77°F	ELECTRICAL CONDUCTIVITY AT 68°F		ELECTRICAL RESISTIVITY AT 68°F
	(68-212°F PER F)	°F		ENGLISH UNITS	EQUAL VOLUME	EQUAL WEIGHT	OHM-CIR. MIL/FOOT
ALLOY 7075	13.1	890-1175	T6	900	33	105	31

## Typical US Mechanical Properties

ALLOY AND TEMPER	TENSION				HARDNESS	SHEAR	FATIGUE	MODULUS
	STRENGTH KSI		ELONGATION PERCENT IN 2 IN.		BRINNELL NUMBER	ULTIMATE SHEARING STRENGTH	ENDURANCE LIMIT	MODULUS OF ELASTICITY
	ULTIMATE	YIELD	1/16 IN. THICK SPECIMEN	1/2 IN. DIAMETER SPECIMEN	500 KG LOAD 10 MM BALL	KSI	KSI	KSI X 10 <sup>3</sup>
7075-O	33	15	17	16	60	22	–	10.4
7075-T6, T651	83	73	11	11	150	48	23	10.4

The following typical properties are not guaranteed, since in most cases they are averages for various sizes, product forms and methods of manufacture and may not be exactly representative of any particular product or size. These data are intended only as a basis for comparing alloys and tempers and should not be specified as engineering requirements or used for design purposes.