

## ALUMINIUM ALLOYS - CHEMICAL COMPOSITION (WEIGHT PER CENT) OF BS 1490:1988 ALLOYS

ALLOY	Cu	Mg	Si	Fe	Mn	Ni	Zn	Pb	Sn	Ti	ADDITIONAL ELEMENTS	OTHERS EACH TOTAL	
LM0	0.03	0.03	0.30	0.40	0.03	0.03	0.07	0.03	0.03	-	Al 99.50 min	-	-
LM2	0.7-2.5	0.30	9.0-11.5	1.0	0.5	0.5	2.0	0.3	0.2	0.2	-	-	0.50
LM4	2.0-4.0	0.20	4.0-6.0	0.8	0.2-0.6	0.3	0.5	0.1	0.1	0.2	-	0.05	0.15
LM5	0.1	3.0-6.0	0.3	0.6	0.3-0.7	0.1	0.1	0.05	0.05	0.2	-	0.05	0.15
LM6	0.1	0.10	10.0-13.0	0.6	0.5	0.1	0.1	0.1	0.05	0.2	-	0.05	0.15
LM9	0.20	0.2-0.6	10.0-13.0	0.6	0.3-0.7	0.1	0.1	0.1	0.05	0.2	-	0.05	0.15
LM12	9.0-11.0	0.2-0.4	2.5	1.0	0.6	0.5	0.8	0.1	0.1	0.2	-	0.05	0.15
LM13	0.7-1.5	0.8-1.5	10.0-13.0	1.0	0.5	1.5	0.5	0.1	0.1	0.2	-	0.05	0.15
LM16	1.0-1.5	0.4-0.6	4.5-5.5	0.6	0.5	0.25	0.1	0.1	0.05	0.2 <sup>1</sup>	-	0.05	0.15
LM20	0.4	0.2	10.0-13.0	1.0	0.5	0.1	0.2	0.1	0.1	-	0.05	0.2	0.20
LM21	3.0-5.0	0.1-0.3	5.0-7.0	1.0	0.2-0.6	0.3	2.0	0.2	0.1	0.2	-	0.05	0.15
LM22	2.8-3.8	0.05	4.0-6.0	0.6	0.2-0.6	0.15	0.15	0.1	0.05	0.2	-	0.05	0.15
LM24	3.0-4.0	0.30	7.5-9.5	1.3	0.5	0.5	3.0	0.3	0.2	0.2	-	-	0.50
LM25	0.20	0.20-0.6	6.5-7.5	0.5	0.3	0.1	0.1	0.1	0.05	0.2	-	0.05	0.15
LM26	2.0-4.0	0.5-1.5	8.5-10.5	1.2	0.5	1.0	1.0	0.2	0.1	0.2	-	0.05	0.15
LM27	1.5-2.5	0.35	6.0-8.0	0.8	0.2-0.6	0.3	1.0	0.2	0.1	0.2	-	0.05	0.15
LM28 <sup>2</sup>	1.3-1.8	0.8-1.5	17-20	0.7	0.6	0.8-1.5	0.2	0.1	0.1	0.2	Cr0.6Co0.5	0.10	0.30
LM29 <sup>2</sup>	0.8-1.3	0.8-1.3	22-25	0.7	0.6	0.8-1.3	0.2	0.1	0.1	0.2	Cr 0.6 Co0.5	0.10	0.30
LM30	4.0-5.0	0.4-0.7	16-18	1.1	0.3	0.1	0.2	0.1	0.1	0.2	-	0.10	0.30
LM31 <sup>3</sup>	0.1	0.5-0.75	0.25	0.5	0.1	0.1	4.8-5.7	0.05	0.05	0.25 <sup>1</sup>	Cr 0.4-0.6	0.05	0.15

Note : Single figures in the table are maxima. In case where alloys are required in the modified condition, the level of any modifying element is not limited by the specified maximum value for "other elements".

1. 0.05% minimum if Ti alone is used for grain refining

2. LM 28 and 29 castings are also subject to metallographic structure requirement. LM 31 castings in the M condition have to be naturally aged for 3 weeks before use or determination of mechanical properties.