

# Magnesium Sheet & Plate Alloy Compositions



Provided Courtesy of Materials Technology@TMS

The following is a summary of the compositions of typical magnesium sheet and plate alloys.

Compositions are limits where a range is given for major alloying additions.

Compositions are nominal if a single value is given for intentional alloying additions.

For additional resources, visit <http://www.materialstechnology.org>

COMPOSITION wt.%															Reference	Link
Alloy	Al	Zn	RE	Zr	Ag	Mn	Y	Th	Li	Cu	Si	Sr	Ca	Others		
AZ31B	2.5-3.5	0.7-1.3				0.2-1.0									Magnesium-Elektron Corporate Site	<a href="#">Magnesium-Elektron</a>
	3	1				0.6								0.005 max Ni, 0.005 max Fe	Handbook of Materials Selection, ed. Kutz, Myer, 2002 John Wiley & Sons	<a href="#">Read the Full Article</a>
ZM21		2				1									Magnesium-Elektron Corporate Site	<a href="#">Magnesium-Elektron</a>
LA141	1.0-1.5					0.15 max			13.0-15.0	0.04 max	0.10 max			0.005 max Ni, 0.005 max Fe, 0.005 max Na, 0.30 max others total	P. D. Frost, "Technical and Economic Status of Magnesium-Lithium Alloys", Batelle Memorial Institute, NASA SP-5028, Washington, D. C., 1965	<a href="#">Read the Full Report</a>
LAZ933	3	3							9						P. D. Frost, "Technical and Economic Status of Magnesium-Lithium Alloys", Batelle Memorial Institute, NASA SP-5028, Washington, D. C., 1965	<a href="#">Read the Full Report</a>
Red Top															NOT AVAILABLE	
AQ-BLU															NOT AVAILABLE	
Electron Tooling Plate	3	1													Magnesium-Elektron Corporate Site	<a href="#">Magnesium-Elektron</a>