



## Chemical and Physical Characteristics of VALIMET AM Grade Spherical Aluminum Alloy Powders

	AM 103 (AlSi10Mg)	AM 6061	AM 7075	AM 2024	AM 120 (4047)	*AM 205 (AMS 4471)	AM 357
Aluminum	Balance	Balance	Balance	Balance	Balance	Balance	Balance
Boron, wt. %	--	--	--	--	--	1.25-1.55	--
Chromium, wt. %	--	0.04-0.35	0.18-0.28	0.10 Max.	--	--	--
Copper, wt. %	0.03 Max.	0.15-0.40	1.20-2.0	3.8-4.9	0.25 Max.	4.2-5.0	0.20 Max.
Iron, wt. %	0.40 Max.	0.70 Max.	0.50 Max.	0.50 Max.	0.25 Max.	0.08 Max.	0.07 Max.
Magnesium, wt. %	0.25-0.45	0.80-1.20	2.1-2.9	1.2-1.8	0.08 Max.	0.20-0.33	0.45-0.70
Manganese, wt. %	0.15 Max.	0.15 Max.	0.30 Max.	0.3-0.9	0.10 Max.	--	0.10 Max.
Silicon, wt. %	9.0-11.0	0.40-0.80	0.40 Max.	0.50 Max.	11.0-13.0	0.10 Max.	6.5-7.5
Silver, wt. %	--	--	--	--	--	0.6-0.9	--
Titanium, wt. %	0.15 Max.	0.15 Max.	0.20 Max.	0.15 Max.	--	3.00-3.85	0.04-0.20
Zinc, wt. %	0.10 Max.	0.25 Max.	5.1-6.1	0.25 Max.	0.15 Max.	--	0.10 Max.
Others, Each wt. %	<0.05	<0.05	<0.05	<0.05	<0.05	<0.08	<0.05
Others, Total wt. %	<0.15	<0.15	<0.15	<0.15	<0.15	<0.17	<0.15

\*AM 205 material sold through Eckart America Corporation

*Any of the alloys listed above are available in various sizing options.*

### Microtrac Analysis (Nominal PSD Values)

	Nominal Distribution	Coarse "C" Distribution
90 %	52 μm	64 μm
50 %	34 μm	42 μm
10 %	17 μm	26 μm

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