

TEKMAT™ **AlSi7Mg-63/20-F357**

Aluminum Alloy Spherical Powder

- ▶ Product no.: 39238
- ▶ Data Sheet no.: v39238-18-1
- ▶ Composition: AMS4289 (F357)
- ▶ Size Fraction: - 63 + 20 μm

TEKMAT™ AlSi7Mg-63/20-F357 :

- Plasma atomized powder
- High purity material
- Excellent flowing properties
- High packing density

Technical Specifications

▶ Particle Size Distribution

- Sieve Analysis (ASTM B214) - μm , wt%

Size (μm)	Min	Max
+75	---	0.5
+63	---	5
-63	95	---

- Laser scattering (ASTM B822) - μm , vol%

Size	Min	Max
D10	20	---
D50	---	---
D90	---	70

▶ Density & Flow

Tap Density: $\geq 1.5 \text{ g/cm}^3$

Apparent Density: $\geq 1.3 \text{ g/cm}^3$

Flow Test (SLM Funnel) : < 70 sec./50g

▶ Chemical Composition

7.0Si - 0.55Mg - 0.12Ti (F357)
Meets AMS4289 Table 1

Silicon (Si):	6.5 – 7.5%
Iron (Fe):	$\leq 0.10\%$
Copper (Cu):	$\leq 0.20\%$
Manganese (Mn):	$\leq 0.10\%$
Magnesium (Mg):	0.40 – 0.7%
Zinc (Zn):	$\leq 0.10\%$
Titanium (Ti):	0.04 – 0.20%
Beryllium (Be):	$\leq 0.002\%$
Carbon (C):	to be reported
Hydrogen (H):	to be reported
Nitrogen (N):	to be reported
Oxygen (O):	to be reported
Other, each:	$\leq 0.05\%$
Other, total:	$\leq 0.15\%$
Aluminum (Al):	Balance

