

# LION - G. UNS. N 06007

## Chemical Composition

Element	Content (%)	Iron, Fe	Molybdenum, Mo	Cobalt, Co	Niobium, Nb	Copper, Cu
Chromium, Cr	21-23.5	18-21	5.5-7.5	2.5 max	1.75-2.5	1.5 min
Manganese, Mn	Silicon, Si	Tungsten, W	Carbon, C	Phosphorus, P	Sulfur, S	Nickel, Ni
41276	1 max	1 max	0.05 max	0.04 max	0.03 max	Remainder

## Physical Properties

The physical properties of LION - G™ are given in the following table.

Properties	Metric	Imperial
Density	8.91 g/cm <sup>3</sup>	0.322 lb/in <sup>3</sup>
Melting point	1343°C	2450°F

## Mechanical Properties

The mechanical properties of LION - G™ are given in the following table.

Properties	Tensile strength	Yield strength (0.2% offset)	Modulus of elasticity (room temperature)	Elongation at break	Hardness, Brinell (estimated from Rockwell C for Brinell 10 mm ball/3000 kg load)	Hardness, Knoop (estimated from Rockwell C)	Hardness, Rockwell A (estimated from Rockwell C)	Hardness, Rockwell C	Hardness, Vickers (estimated from Rockwell C)
Metric	Min 760 MPa	700-860 MPa	192 GPa	Min 20%	290	345	66	Max 31	300
Imperial	Min 110000 psi	102000-125000 psi	27800 ksi	Min 20%	290	345	66	Max 31	300

## Thermal Properties

The thermal properties of LION - G™ are given in the following table.

Properties	Metric	Imperial
Thermal expansion coefficient (@20°C/68°F)	13 µm/m°C	7.22 µin/in°F