

Stainless steel 316L spherical powder

316L (UNS S31603 / 1.4404) is an 18/8 austenitic stainless steel with an addition of 2.5% Molybdenum, to provide superior corrosion resistance to type 304 stainless steel. 316L has improved pitting corrosion resistance and has excellent resistance to sulphates, phosphates and other salts. 316L has better resistance than standard 18/8 types to sea water, reducing acids and solution of chlorides, bromides and iodides.

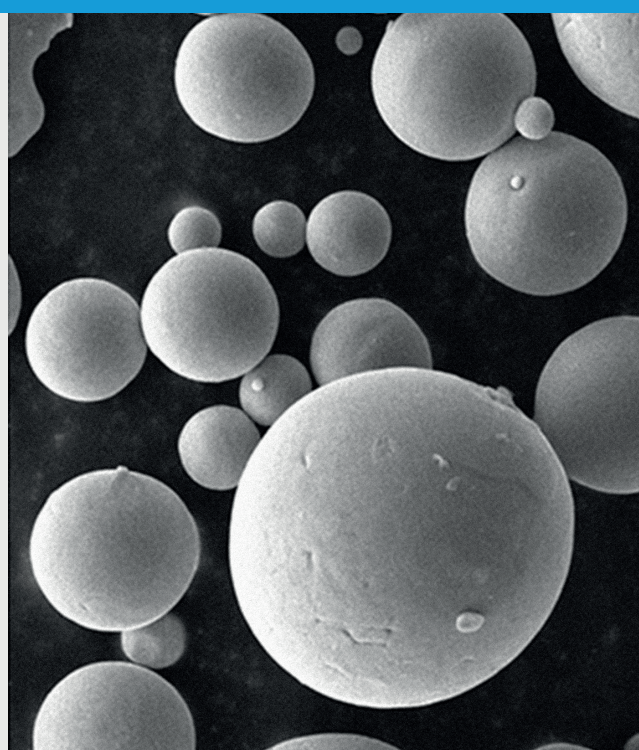
Type 316/316L has been used in handling many chemicals used by the process industries, including pulp and paper, textile, food, pharmaceutical, medical, and other chemical processing.

CHEMICAL COMPOSITION

	MIN	MAX
Cr	17.5	18.0
Ni	12.7	10-14
Mo	2.25	2.50
Mn	1.25	2
C	-	<0.03
S	-	<0.03
Cu	-	<0.75
Si	-	<0.75
P	-	<0.025
Fe	Balance	Balance

MECHANICAL COMPOSITION

	Horizontal direction (XY)	Vertical direction (Z)
Ultimate tensile strength Rm (MPa)	540	538
Yield strength Rp0.2 (MPa)	374	368
Elongation (%)	28	24



PHYSICAL PROPERTIES

Particle Size Range	0 - 53 µm	53 - 105 µm
Morphology	Spherical	Spherical
Particle size distribution	D10: 15µm	D10: 55µm
	D50: 35µm	D50: 76µm
	D90: 58µm	D90: 102µm
Angle of repose	≤40°	
Apparent density	3.8 g/cm ³	4.1 g/cm ³

Standards satisfied: ASTM F745, ASTM F138, ASTM F75

Particle size distribution. Laser diffraction.

