

Stainless Steel 17-4PH Material Data Sheet

Powder Description

Parts made from stainless steel 17-4PH can be machined, spark-eroded, welded, micro shotpeened, polished and coated if required. The proper hardness and mechanical properties of parts made by stainless steel 17-4PH can be achieved by solution annealing and aging treatments. Stainless steel 17-4PH is widely used as the structural material in aerospace, petrochemical, power plants and marine fields, due to its high tensile properties, toughness and corrosion resistance at service temperature below 300°C.

Safety Recommendation

Please refer to the Safety Data Sheet (SDS) provided.

Chemical Composition

Elements [1]	Fe	Cr	Ni	Cu	Si	Mn	C	Nb+Ta	P+S
Min [wt.%]	Bal.	15	3	3	0	0	0	0.15	0
Max [wt.%]	Bal.	17.5	5	5	1	1	0.07	0.45	0.07

Powder Properties

Particle Size Distribution [µm] [2]	Flowability [s/50g] [3]	Apparent Density [g/cm ³] [4]
15 - 45	<19	4.0

Additional Comments

- [1] The data is valid for the powder material
- [2] Particle size distribution is measured according to ISO 13322-2
- [3] Flowability is measured according to DIN EN ISO 4490
- [4] Apparent density is measured according to DIN EN ISO 3923-1