Datasheet

TMP17-4PH

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TMETAL

Product Overview

TMP17-4PH stainless steel powder has remarkable combination of superior properties that offers the highest degree of corrosion protection. Its good strength, hardness, and corrosion resistance make the material long-lasting and reliable. TMP17-4PH is ideal for a variety of applications such as aerospace parts, oil and petrochemical equipment, and chemical processing components.

Chemical Composition	Fe	Cr	Ni	Cu	Nb	Si	C	Other
TMP17-4PH	Balance	17	4.5	4.0	0.33	0.31	0.013	< 1.0

Powder Properties	Condition A	Condition H 900	Condition H 1075
Density (g/cm^3)	7.78	7.80	7.82
Electrical Resistivity (microhm-cm)	98	77	-
Specific Heat (kJ/kg•K (0-100°C))	0.46	0.46	-
Mean Coefficient of Thermal Expansion in/in/ °F (m/m•K)			
-100 - 70°F (-73 - 21°C)	-	6.8×10^{-4} (10.4)	-
70 - 200°F (21 - 93°C)	6.0×10^{-4} (10.8)	6.0×10^{-4} (10.8)	6.3×10^{-4} (11.3)
70 - 600°F (21 - 316°C)	6.2×10^{-4} (11.2)	6.3×10^{-4} (11.3)	6.6×10^{-4} (11.9)
70 - 800°F (21 - 427°C)	6.3×10^{-4} (11.3)	6.5×10^{-4} (11.7)	6.8×10^{-4} (12.2)

Application:

- MIM (Metal injection molding)
- Aerospace applications
- Oil and petrochemical equipment
- Chemical processing components
- Gas turbines
- Pump shafts

Particle Size Distribution (Wt%)

- D10.µm: 19
- D50.µm: 30
- D90.µm: 45

Contact: tmetal.com/contact