

ADVAMET[®] Feedstock for Metal Injection Molding (MIM) TYPICAL CERTIFICATION

P/N: 17-4PH-Combined

Product: Prealloyed 17-4 PH SS

Nominal Metal Composition:

Gas Atomized 17-4PH SS and/or Water Atomized 17-4PH SS (Rounded)

Nominal Binder Content: To Be Determined

Binder: Proprietary wax-polymer base binder

Metal Powders:

d90 < 22 μ Gas atomized 17-4PH SS / 9 - 11 μ Rounded water atomized 17-4PH SS

17-4PH-P6, 17-4PH-P7, 17-4PH-S6, 17-4PH-S7 may be blended together in any proportion specified by the customer to achieve a special binder level and/or a particular combination of properties. Some fabricators like to combine gas and water atomized powders to obtain the increased green strength associated with water atomized material while retaining most or all of the superior sinterability of the gas atomized powder.

Chemical Composition (Weight %)

Cr	15.5 – 17.5	Si	1.00 max	C	0.07 max
Ni	3.0 – 5.0	Mn	1.00 max	N	Report
Cu	3.0 – 5.0	P	0.04 max	O	Report
Cb, Ta	0.15 – 0.45	S	0.03 max	Fe	Balance

Viscosity

(To be determined) Poise at 175 C per ASTM D1238 modified

(Process details available on request)

A weighted average of the properties of the individual feedstocks will give a good approximation of the properties of the combination.

Density

(To be determined) g/cm³ (measured with helium pycnometer)

A weighted average of the properties of the individual feedstocks will give a good approximation of the properties of the combination.

Notes

1. Composition of metal constituents is determined by calculation from vendor data.
2. Composition of sintered material, particularly for C and O contents, depends on processing used by customer.
3. Properly processed feedstock will conform to MPIF Standard 35 Specification MIM-17-4PH.

Supplier

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