



■ Specification

- Metal : Stainless steel 17-4PH
- External shape : Pellet (φ2.5mm, 5 - 7mm)
- Mass : ~ 0.2 g/piece
- Density : ~ 5.6 g/cc
- Fluidity : 100 - 200 g/10 min (MFR)
(180°C - 5kgf)

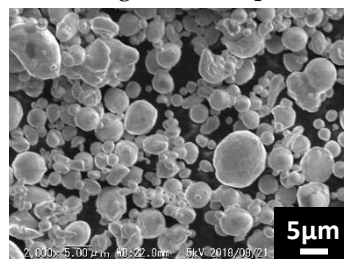
■ Characteristics (Sintered component)

- Shrinkage factor : ≥ 16 %
- Density : ≥ 7.5 g/cm³
- Hardness : depending on the heat treatment after sintering
- Elongation : depending on the heat treatment after sintering
- Tensile strength : depending on the heat treatment after sintering
- Surface roughness : $\leq Ra 0.8 \mu m$

Appearance



SEM image of metal powder



Metal composition (wt.%)

| Composition | C | Si | Mn | P | S | Cu | Ni | Cr | Nb | Fe |
|-------------|-------|------|----------|----------|----------|------------|------------|------------|------------|------|
| 17-4PH | ≤0.07 | ≤0.5 | Max 0.03 | Max 0.04 | Max 0.03 | 3.00 ~5.00 | 3.00 ~5.00 | 15.5 ~17.5 | 0.15 ~0.45 | Bal. |

■ Recommend process conditions

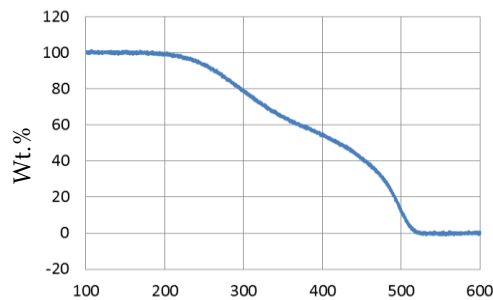
- Molding temperature : 160 - 190°C
- Debinding temperature : Refer the TG graph
- Sintering temperature : 1100 - 1300°C
(Non-oxidizing atmosphere)

Remark

The molding and sintering conditions must be optimized according to product

■ Recommended storage conditions

- Temperature : 20 - 30°C
- Humidity : $\leq 50\%$ RH
- Expiration date : approx. 6 months (Under the recommended conditions)



Thermal gravity analysis (TG) data (Ar atm)

Disclaimer

- Micro MIM Japan will accept no responsibility for any components quality or the product quality, which are made of this feedstock.
- Micro MIM Japan is not liable for any production process judgement from this feedstock user.
- The above values are standard. Please understand it is not the guaranteed value.

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