

AM Stainless Powder Material Data Sheet

Powder Description

AM Stainless Powder Material is a precipitation hardening stainless powder suitable for parts where a good combination of strength and corrosion resistance is needed.

The powder has chemical composition as below and is gas atomized through induction melting and atomization under inert to gas and later tested ensure the product quality.

The powder is easy to print and works in most LPBF machines with low pre-heating.

The material properties for the grade can be improved by heat treatment after printing and an ageing is recommended. An ageing at 500-550°C would give a hardness of about 48HRC.

Safety Recommendation

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

Chemical Composition

Elements [1]	Fe	C	Si	Mn	Cr	Ni	Mo	Al
Typical	Bal.	0.03	0.3	0.3	12	9	1.5	1.6

Powder Properties

Particle Size Distribution [µm] [2]	Flowability [s/50g] [3]	Apparent Density [g/cm³] [4]
15 - 63	<18	4.3

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