

**CERTIFICATE OF ANALYSIS: 202404180025**

Material Grade	Hastelloy X Powder	Product No.	NAMHX-1545
Customer No.	ILB	Order No.	ILB-240410
Lot No.	20231218-01	Quantity	5 kg
Process	PREP	Powder Size	15-45µm

**Chemical Compositions / wt%**

Element	Specification	Tested
Ni	Bal	Bal
Mo	8.0-11.0	9.03
Fe	17.0-20.0	18.57
Cr	20.5-23.0	21.62
Co	0.5-2.5	1.58
W	0.2-1.0	0.87
Si	1.0 max.	0.022
Mn	1.0 max.	0.009
Al	0.5 max.	0.041
Ti	0.15 max.	0.010
Cu	0.5 max.	0.007
C	0.05-0.15	0.066
S	0.015 max.	0.0017
P	0.025 max.	0.0008
O	/	0.029

Standards: GB/T 14265, GB/T 23942

**Powder Property**

Particle Size Distribution (laser diffraction analysis)	D10/um	D50/um	D90/um	Standards
Flowability (s/50g)	23.7	37.3	49.8	GB/T 19077
Apparent density (g/cm <sup>3</sup> )		13.2		GB/T 1482
		4.87		GB/T 1479.1

Test condition: Temperature 25° C, Humidity 40%

Judgement: Pass



Check: Y.Tang

Approval: L.Zhang

Date: 2024-04-18