

## PRODUCT TEST CERTIFICATE

Product Name	Spherical Nb Powder	Size	15-45µm
Lot NO.	HM230805-Nb	Date	Aug 10, 2023
<b>Chemical Composition</b>			
Element	Value (%)	Element	Value (%)
Nb	Bal.	Ta	<0.035
Cu	<0.001	Al	0.002
W	<0.005	Mn	0.0015
Mo	0.0019	Si	0.002
Fe	<0.005	Ni	<0.002
Ti	<0.001	Other	<0.02
<b>Gas Impurities</b>			
Element	Value(%)	Element	Value(%)
C	0.0098	O	0.026
H	0.0023	N	0.0094
<b>Apparent Density (g/cm3)</b>		<b>Tap Density (g/cm3)</b>	
≥4.5		≥5.6	
		<b>Hall Flow Rate(s/50g)</b>	
		≤16.5	
SEM			