

**PRODUCT TEST CERTIFICATE**

Product Name	Spherical Ni Powder		Type	15-45µm	
Lot No.	20220726-Ni		Quantity	50 Kg	
<b>Chemical Composition</b>					
Element	Value (%)	Test Method	Element	Value (%)	Test Method
Ni	≥99.9	—	Zn	<0.001	ICP-AES
Fe	0.0021	ICP-AES	Mn	<0.001	ICP-AES
Co	<0.008	ICP-AES	Na	<0.001	ICP-AES
Cu	0.0040	ICP-AES	Si	0.003	ICP-AES
Ca	0.0039	ICP-AES	Mg	0.0024	ICP-AES
<b>Gas Impurities</b>					
Element	Value(%)		Element	Value(%)	
C	0.0021		O	0.064	
<b>Density</b>			<b>Hall Flow Rate</b>		
Apparent Density (g/cm <sup>3</sup> )	Tap Density (g/cm <sup>3</sup> )		Value(s/50g)		
/	4.17		/		
SEM					