

INDO-MIM Limited.

#45(P), KIADB Industrial Area, Doddaballapur, Bengaluru - 561203

Phone: +91-080-22048600/636 | FAX: +91-080-27630532

Email: infopowders@indo-mim.com or infohq@indo-mim.com | Website: www.indo-mim.com

INDO-SPHERE NIN-90

NiN-90 is a precipitation hardenable master alloy, having high stress-rupture strength and creep resistance at high temperatures. Its chemical composition corresponds to UNS N07090 for use in additive manufacturing processes. Vacuum Induction Melting - Inert Gas Atomization process is used at INDO-MIM for manufacturing of powder. Our unique ASB technique improves powder sphericity, which enhances flowability in achieving consistent density and uniform build rates.

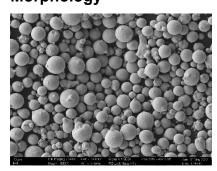
Particle Size Distribution

Light scattering (ASTM B822 / ISO 13320-1)					
Application	Size Range	D10%	D50%	D90%	
МІМ	<22µm	5.0 max	12.0 max	22.0 max	
ВЈ	<25µm	5.5 max	13.5 max	25.0 max	
LPBF	15 – 53μm	24.0 max	36.0 max	54.0 max	

Physical Properties

Property	g/cc	Test Method
Tap Density	4.95 min	ASTM B527
True Density	8.30 min	ASTM B923

Morphology







* Applicable only for LPBF

Customization on chemical composition

Chemical Composition (weight %)

Range (%)

0.13 max

1.00 max

1.00 max

0.05 max

0.05 max

17.0 - 22.0

0.00 - 0.50

15.00 - 21.00

2.00 - 3.00

1.00 – 2.00 2.50 max

0.04 max

0.04 max

Balance

Element

Carbon

Silicon

Sulphur

Cobalt

Iron

Titanium

Oxygen*

Nitrogen*

Nickel

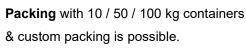
Aluminium

Chromium

Molybdenum

Manganese
Phosphorous

& particle size can be made.



MIM: Metal Injection Molding | BJ: Binder Jetting | LPBF: Laser Powder Bed Fusion

^{*}Specification is only for illustrative purposes, and it varies with specific application requirements