

# INLAND ATOMIZE METAL POWDER LLP

Survey No. 230/2, Por-Manglej Road, Village - Manglej, Ta. KARJAN, Vadodara - 391243

Email: [Info@Inlandatomizemetalpowder.com](mailto:Info@Inlandatomizemetalpowder.com)

Mo: +9196623 00876

## IAMP NiFuse

**Material:** Nickel Base Super Alloy

**Manufacturing Method:** Gas Atomization Process

**NiFuse** is a **Self-fluxing Ni-Cr-B-Si alloy**, comparable to NiCrBSi grades used for wear and corrosion-resistant coatings suitable for Flame Spray, HVOF, Plasma Spray, and PTA

### Chemical Composition (Weight %)

Element	C	Si	Cr	B	Fe	W	Ni	Fused Hardnes (HRC)
IAMP NiFuse – 40	0.50	3.2	8.50	1.9	5 Max		Bal	35 – 40
IAMP NiFuse – 50	0.50	3.5	13.50	2.5	5 Max		Bal	45 – 50
IAMP NiFuse – 60	0.60	4.5	14.50	3.0	5 Max		Bal	55 – 63
IAMP NiFuse – 65	0.80	4.2	16.00	3.2	5 Max		Bal	58 - 65
IAMP NiFuse – 65W	0.65	4.0	15.20	3.0	5 Max	16	Bal	58 – 65

### Powder Characteristics

- Particle Shape: Spherical (high sphericity due to gas atomization)
- Self-fluxing nickel alloy suitable for thermal spray and fusion applications
- Excellent flowability and uniform particle size distribution
- Produces high bond strength with steel and nickel-based substrate
- Good resistance to oxidation and mild corrosion
- Apparent Density: 3.8 g/cc Min

### Particle Size

- Flame Spray: 45 – 106  $\mu\text{m}$  / 20 – 106  $\mu\text{m}$
- HVOF: 15 – 45  $\mu\text{m}$
- PTA (Plasma Transferred Arc) / Laser Cladding: 45 – 150  $\mu\text{m}$
- Custom made particle size can be made upon request

### Packaging:

Powder will be supplied by standard packing in Plastic Jar of 1Kg, 5Kg, and 25Kg or can be supplied as per customer special requirement.

### Storage:

- Keep in a cool, dry environment away from humidity
- Tumble container before use to ensure powder homogeneity
- Reseal containers immediately after powder withdrawal
- If moisture pickup occurs, dry at 65–95 °C for 120 Minutes with lid loosened
- Remove Silica Gel pouch before using the powder

*Specification is only for Reference purposes, and it varies with application requirements*