

INLAND ATOMIZE METAL POWDER LLP

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

Email: Info@Inlandatomizemetalpowder.com

Mo: +9196623 00876

IAMP NiBrazeCr

Material: Nickel Base Super Alloy

Manufacturing Method: Gas Atomization Process

IAMP NiBrazeCr alloy is a high-silicon nickel–chromium alloy powder designed for oxidation, hot-corrosion, and sulfidation resistance at elevated temperatures. The high silicon content promotes the formation of a protective silica-rich oxide scale, providing excellent surface protection in aggressive environments. The alloy is non-self-fluxing and is intended for thermal spray applications without post-fusion.

Chemical Composition (Weight %)

Grade	C	Si	Cr	B	Ni
IAMP NiBrazeCr	0.06	10.0	19.0		Bal
IAMP NiBrazeCr B	0.06	7.20	15.0	1.30	Bal

Powder Characteristics

- Particle Shape: Spherical (high sphericity due to gas atomization)
- High resistance to oxidation and scaling at elevated temperatures
- Excellent protection against sulfidation and hot corrosion
- Dense, adherent coatings with good substrate bonding
- Low carbon content for improved ductility and crack resistance
- Stable performance in cyclic thermal environments
- No fusion or remelting required after spraying

Applications

- Chemical processing equipment, Heat exchangers
- Boiler tubes and superheaters, High-temperature ducting and stacks
- Oil & gas hot-corrosion environments

Particle Size

- Flame Spray: 45 – 106 μm / 20 – 106 μm
- HVOF: 15 – 45 μm
- Laser Cladding: 45 – 150 μm
- 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