



Alloy Iron Nickel Cobalt **NANOPARTICLES**

Fe:Ni:Co

Stock No:
NS6130-07-704

CAS	:	7439-89-6 / 7440-02-0 / 7440-48-4
Purity	:	99.9%
APS	:	<100nm
Color	:	Black
Form	:	Powder

Technical Specification

Molecular Formula	:	Fe:Ni:Co
Density	:	5.2g/cm ³
Melting Point	:	2600°C

Chemical Composition

Assay	:	99.9%
Fe	:	55%
Ni	:	28%
Co	:	17%
Other Metal	:	< 0.1 %

Iron-nickel-cobalt alloy is designed for precise and uniform thermal expansion characteristics. The coefficient of thermal expansion of nickel and iron is more or less the same. However, adding nickel to iron can result in an alloy with a reduced coefficient of thermal expansion by an order of magnitude. These characteristics make them suitable for use in a myriad of applications, including medical, electronics, aerospace engineering, telecommunications and cryogenic components.

Iron-nickel-cobalt alloy is often utilized with both alumina type ceramic materials and the harder Pyrex or borosilicate glasses in the production of hermetic seals. It is widely used in the manufacture of diodes and transistors for lids and closures in many different hybrid electronic circuit packages as well as in the production of microwave tubes.

Application:

- ✓ Hard glass sealing
- ✓ Ceramic package sealing
- ✓ CRT electron gun electrodes
- ✓ Super alloys
- ✓ Aerospace materials

ISO 9001:2015
CERTIFIED COMPANY



20ZICE4589C



19ZAZGO1274G



20ZICE4588M



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