



Iron Chromium Cobalt **NANODARTIC** 

25%

CAS 7439-89-6 / 7440-47

Purity 99.9% **APS** <80nm Color Black

Powder Form

## **Technical Specification**

Fe:Cr:Co Molecular Formula  $0.79\rho$  in  $\mu\Omega$ m 1.85JsinT

## **Chemical Composition**

99.9% **Assay** Fe 64% Cr 25% 11% Other Metal < 0.1 %

ISO 9001:2015

















Fe:Cr:Co

**Composition Chart** 

## Stock No:

NS6130-07-707

Iron Chrome Cobalt is a metal alloy of cobalt and chromium. Cobaltchrome has a very high specific strength and is commonly used in gas turbines, dental implants, and orthopedic implants. This material is machinable and malleable and was originally designed as a replacement for CuNiFe. While it can still be used for this, the entire application must be known to match the properties needed. FeCrCo Magnets also have high remanence but low Hc which is similar with AlNiCo Magnets, They also have high working temperature and very low-temperature coefficient of Br which is also similar with AlNiCo Magnets. They are also made magnetism by a process of heat treatment, and they also classified to the isotropic and anisotropic material by the process of magnetic orientation.

# **Application:**

- Malleable FeCrCo is easier to machine than AlNiCo
- FeCrCo can be hot deformed
- FeCrCo usually does not require any corrosion coating
- Compasses
- Hysteresis coupling applications e.g. a multi-pole permanent magnet rotor turning a FeCrCo disc by hysteresis

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