# Copper Nickel Alloy Dia 0.1~8mm CuNi NC040 CuNi34 Wire For Low Voltage **Circuit Components**

# **Basic Information**

. Place of Origin: China Brand Name: Victory

· Certification: ROHS,ISO 9001 Model Number: CuNi34 NC040 • Minimum Order Quantity: 5~10kgs • Price: 20~30\$/kg

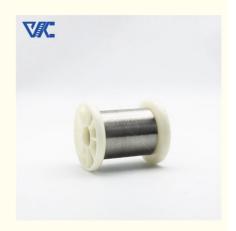
 Packaging Details: Wooden box/pallet, spool wire with carton

box, coil with polybag

• Delivery Time: 5-21 days

. Payment Terms: L/C, T/T, Western Union, MoneyGram

Supply Ability: 300 tons per month



# **Product Specification**

• Product Name: Copper Nickel Alloy Dia 0.1~8mm CuNi

NC040 CuNi34 Wire For Low Voltage Circuit

Components

• Material: Cu/Ni/Mn Nickel: 34%

• Resistivity:  $0.4\mu\Omega.m20^{\circ}C$ . Tensile Strength: 400 MPA · Density: 8.9 G/cm3 Hard / Soft • Condition: · Sureface: Bright . Delivery Time: 7-20 Days • Maximum Temperature: 350°C 1180°C . Melting Point: • TCR: 0 X10-6/C • EMF Vs Cu: -39 UV/C mile and a second



# More Images



### **Product Description**

### Introduction:

Cuni 34 is a copper-nickel alloy that contains approximately 34% nickel.

This type of alloy is known for its excellent resistance to corrosion, particularly in marine environments, making it suitable for use in various applications such as marine engineering, offshore structures, and heat exchangers.

The addition of nickel to copper imparts increased strength, ductility, and resistance to corrosion, making Cuni 34 a popular choice in industries where these properties are essential.

#### **Application:**

**Marine Engineering:** Cuni 34 wire is widely used in marine engineering applications due to its excellent corrosion resistance in seawater. It is used in the construction of ship hulls, offshore platforms, and other marine structures.

**Heat Exchangers:** The corrosion resistance and thermal stability of Cuni 34 wire make it suitable for use in heat exchangers where it can withstand high temperatures and corrosive environments.

**Electrical Conductors:** Cuni 34 wire is used in electrical applications where a combination of good electrical conductivity and corrosion resistance is required.

**Instrumentation and Control Systems:** The reliability and durability of Cuni 34 wire make it a preferred choice for instrumentation and control systems in harsh environments.

**Desalination Plants:** Cuni 34 wire is used in desalination plants where it can resist corrosion from saltwater and brine solutions.

**Offshore Structures:** Cuni 34 wire is utilized in the construction of offshore structures such as pipelines, risers, and subsea equipment due to its resistance to corrosion in marine environments.

**Automotive Industry:** Cuni 34 wire is sometimes used in the automotive industry for applications requiring corrosion resistance, such as brake lines and hydraulic systems.

### Advantage:

Cuni 34 alloy, also known as copper-nickel 34, offers several advantages due to its composition and properties:

**Corrosion Resistance:** Cuni 34 alloy has excellent resistance to corrosion, especially in marine environments. This makes it a preferred choice for applications exposed to seawater or other corrosive environments.

Strength and Ductility: The addition of nickel to copper in Cuni 34 alloy enhances its strength and ductility. This allows the alloy to withstand mechanical stresses and deformation without losing its structural integrity.

**Thermal Stability:** Cuni 34 alloy exhibits good thermal stability, making it suitable for use in applications where heat resistance is required, such as in heat exchangers.

**Biofouling Resistance:** The composition of Cuni 34 alloy helps in reducing biofouling, which is the accumulation of microorganisms, plants, algae, or animals on wetted surfaces. This property is beneficial in marine applications where biofouling can be a concern.

**Ease of Fabrication:** Cuni 34 alloy can be easily fabricated using common manufacturing processes such as welding, machining, and forming, allowing for the production of complex components and structures.

Overall, the combination of corrosion resistance, strength, ductility, thermal stability, biofouling resistance, and ease of fabrication makes Cuni 34 alloy a versatile material for various industrial applications, particularly in marine engineering and offshore structures.

### **Parameter:**

Main Chemical composition (%)

NC040 CuNi34	Copper	Nickel	Manganese
Chemical	balance	34%	1~1.5%

## Physical Parameters:

- ·· / ·· · · · · · · · · · · · · · · ·								
Тур	Resistivi ty (μΩ.m2 0°C)	Max working temperature (°C)	Tensile strength (Mpa)	Melting point (°C)	Density (g/cm)	TCR (x10-6/°C) (20~600°C)	EMF vs Cu uV/°C (0~100°C)	Elongation (%)
CuNi	0.4	350	400	1180	8.9	0	-39	25%

# Type of product:

Type of product.						
Туре	Size(mm)		others			
Round wire	0.1~8mm					
Flat ribbon wire	W- 0.5~5mm	T-0.1~3mm	Customized			
Strip/foil	W- 6~250mm	T-0.1~3mm	Odstornized			
Rod	8~200mm					





Contact

Email: victory@dlx-alloy.com

#### **Changzhou Victory Technology Co., Ltd**

+8619906119641

victory@dlx-alloy.com



victory-alloy.com

NO.32 West Taihu Road, Xinbei District, Changzhou, Jiangsu