



Thermal Expansion Coefficient $16.5 \times 10^{-6}/K$ CuNi Alloy 0.1-10mm Copper And Nickel

Our Product Introduction

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Basic Information

- Place of Origin: China
- Brand Name: Victory
- Model Number: CuNi Alloy



Product Specification

- Hardness: 80-120 HV
- Composition: Copper And Nickel
- Emf Vs Cu: -18 UV/C
- Thermal Expansion Coefficient: $16.5 \times 10^{-6}/K$
- Tensile Strength: 400-600 MPa
- Maximum Temperature: 200°C
- Purity: High Purity
- Corrosion Resistance: Excellent
- Highlight: **Copper And Nickel CuNi Alloy, 0.1-10mm CuNi Alloy**



Product Description

Product Description:

The CuNi Alloy has an Emf Vs Cu value of -18 UV/C, which makes it an excellent choice for applications where electrical conductivity is required. The Emf Vs Cu value is a measure of the voltage difference between the CuNi Alloy and copper. This value is important because it determines the ability of the alloy to conduct electricity.

The composition of the CuNi Alloy is copper and nickel, with copper being the primary component. The copper content in the alloy is typically between 60% and 90%, while the nickel content is between 10% and 40%. The precise composition of the alloy can vary depending on the specific application.

The maximum temperature at which the CuNi Alloy can be used is 200°C. This temperature limit makes it suitable for use in various industrial applications, such as marine engineering, power generation, and chemical processing. The high-temperature limit is due to the excellent thermal conductivity and low thermal expansion coefficient of the alloy.

The CuNi Alloy is widely used in various industrial applications due to its unique properties. It is commonly used in the manufacturing of copper metal products, where its high thermal conductivity and excellent ductility make it an ideal choice. The alloy is also used in the manufacturing of Aluminium Copper Alloy, where it is used as a primary component to enhance the mechanical and physical properties of the material.

The CuNi Alloy is available in various diameters, ranging from 0.1mm to 10mm. The diameter of the alloy is an important factor to consider when choosing the right product for a specific application. The diameter of the alloy can affect its mechanical and physical properties, such as strength and ductility.

In conclusion, the CuNi Alloy is a copper-based alloy that is widely used in various industrial applications. It is a combination of copper and nickel, with copper being the primary component. The alloy has excellent mechanical and physical properties, such as high corrosion resistance, high thermal conductivity, and excellent ductility. The maximum temperature at which the alloy can be used is 200°C, and it is available in various diameters ranging from 0.1mm to 10mm. The CuNi Alloy is an excellent choice for applications where electrical conductivity, thermal conductivity, and corrosion resistance are essential.

Features:

Product Name: CuNi Alloy

Resistivity: 0.5

Surface: Bright

Tensile Strength: 400-600 MPa

Application: Industry

Condition: Hard / Soft

Our CuNi Alloy is a copper nickel alloy that is created through copper powder metallurgy. It also contains aluminium copper alloy, making it a durable and reliable choice for industrial applications. With a resistivity of 0.5 and a bright surface, this alloy has a tensile strength of 400-600 MPa and comes in both hard and soft conditions.

Technical Parameters:

Attribute	Value
Application	Industry
Hardness	80-120 HV
Condition	Hard / Soft
Surface	Bright
Emf Vs Cu	-18 UV/C
Composition	Copper And Nickel
Tensile Strength	400-600 MPa
Maximum Temperature	200°C
Corrosion Resistance	Excellent
Resistivity	0.5

Applications:

The Victory CuNi Alloy is an ideal choice for a wide range of industries, including aerospace, defense, and marine. The material's high strength and excellent corrosion resistance make it perfect for use in harsh environments and demanding applications.

One of the most common applications for CuNi Alloy is in heat exchangers and condensers, where it provides superior heat transfer and corrosion resistance compared to other materials. It is also used in the production of marine hardware, including propellers, shafts, and valves, due to its excellent resistance to seawater corrosion.

The Victory CuNi Alloy is also an excellent choice for electrical applications, thanks to its low resistivity of 0.5. It is commonly used in the production of electrical connectors and switches, where its high purity and excellent conductivity are essential.

The product is available in various forms, including wire, rod, and sheet, making it suitable for a wide range of manufacturing processes. Its high purity and excellent mechanical properties make it an ideal choice for precision machining and forming.

In addition to its excellent mechanical and electrical properties, the Victory CuNi Alloy can also be combined with other materials to

create advanced composites. It is often used in combination with Inconel Nickel Alloy to produce high-strength, corrosion-resistant materials that are ideal for use in demanding applications. In summary, the Victory CuNi Alloy is a versatile and high-quality product that is suitable for a wide range of applications. Its excellent mechanical and electrical properties, combined with its high purity and corrosion resistance, make it an ideal choice for industries ranging from aerospace to electrical engineering.

Customization:

Customize your Copper Nickel Alloy product with Victory:

Brand Name: Victory

Model Number: CuNi Alloy

Place of Origin: China

Surface: Bright

Maximum Temperature: 200°C

Resistivity: 0.5

Corrosion Resistance: Excellent

Tensile Strength: 400-600 MPa

Material: Alloy Steel

Our product customization services allow you to tailor your Copper Nickel Alloy product to your specific needs and requirements. Whether you need a specific surface finish, a higher maximum temperature, or a different level of corrosion resistance, we can help. Our experienced team can work with you to design and manufacture a customized CuNi Alloy product that meets your exact specifications. Contact us today to learn more about our Alloy Steel Material customization services.

Support and Services:

Our CuNi alloy product technical support and services include:

- Technical consultations
- Material selection guidance
- Customized alloy development
- Testing and analysis services
- Research and development support
- Quality control and assurance
- On-site technical assistance

Packing and Shipping:

Product Packaging:

Our CuNi Alloy product is carefully packaged and shipped to ensure its protection during transportation. Each product is wrapped in a layer of protective material and placed in a sturdy cardboard box. The box is then sealed and labeled with the product name and specifications.

Shipping:

We offer worldwide shipping for our CuNi Alloy product. The product is shipped via a trusted and reliable courier service to ensure timely and safe delivery. Shipping rates may vary depending on the destination and order quantity. Please contact us for more information on shipping rates and delivery times.

FAQ:

Q: What is the brand name of this product?

A: The brand name of this product is Victory.

Q: What is the model number of this product?

A: The model number of this product is CuNi Alloy.

Q: Where is this product manufactured?

A: This product is manufactured in China.

Q: What are the main features of CuNi Alloy?

A: CuNi Alloy is a copper-nickel alloy that is highly resistant to corrosion and able to withstand high temperatures. It is also known for its excellent electrical conductivity.

Q: What applications is CuNi Alloy commonly used for?

A: CuNi Alloy is commonly used in marine environments, power generation, and in the production of electrical components such as heating elements and resistors.



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