

Our Product Introduction

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High Purity Nickel Metal Foam For Lab Lithium Ion Battery Electrode **Material**

Basic Information

- Place of Origin:
- Brand Name:
- Nickel Foam Model Number:
- Minimum Order Quantity:
- Packaging Details:
- package with polybag • Delivery Time: 5-21 days

China

Victory

500

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

Spool package with Carton box, Coil

 Supply Ability: 300 tons per month



Product Specification

- Product Name:
- Material:
- Density:
- Performance:
- Melting Temperature:

Nickel Foam

0.1-0.8g/cm3

Nickel Metal Foam,

Nickel

- The Aperture:
- Size:

• Feature:

• Purity:

- Application:
- Specific Surface Area:
- Highlight:

More Images

Sound-absorbing 560-700°C High Impact Absorption Ability 97% 0.2mm-8mm (50-130ppi) Request Battery, Filter, Sound Absorbing ≥10 /g

Sound Absorbing Metal Foam, ni nickel foam





Product Description

Introduction:

Nickel foam is a sound-absorbing material with excellent performance, which has a high sound-absorption coefficient at high frequencies; its sound-absorbing performance at low frequencies can be improved through the design of the sound-absorbing structure. Nickel foam is also one of the best electrode materials for making cadmium-nickel batteries and hydrogen-nickel batteries. Nickel foam is a sound-absorbing material with excellent performance, which has a high sound absorption coefficient at high frequencies; the sound absorption performance at low frequencies can be improved through the design of the sound-absorbing structure.

Features:

1. Mass and light: maximum surface area, specific gravity 0.2-0.3, 1/4, wood 1/3. Aluminum and iron 1/30, 1/10 the mass of water and light.

2. Sound absorption: The porous structure has a wide frequency sound absorption characteristic.

3. Electronic wave shield: shielded by a relatively thin electronic wave with a thickness of about 90 db.

- 4. Processability: It can be lowered, bent, and easily adhered.
- 5. High temperature refractory: The stable form is difficult to burn, high temperature.

6. Recycling: Metal waste can be recycled 100%.

7. Thermal conductivity: The thermal conductivity of porous materials is strong.

8. Breathable: Uniform three-dimensional network structure, the function of a filter, super stable gas and fluid flow and performance.

9. Insulation: With additional processing, high noise shielding can be obtained, and the sound insulation effect is good.



11. The temperature is 1100 degrees, resistant to various acid corrosion, good permeability, fast and uniform pore structure, and heating heat.

Parameter:	
Material	Nickel Foam
Purity	> 99.99%(excellent anti-corrosive)
Surface Density	346g/m2
Length	1m
Width	300mm
Thickness	1.6 mm
Net weight	104g
Porosity	≥95% (80-110 Pores per Inch. average hole diameters about 0.25mm)
Extensibility	Lengthwise≥5%; Widthwise≥12%
Tensile Strength	Lengthwise≥1.25N/mm^2; Widthwise≥1.00N/mm^2

Production Process:

The process of preparing foamed nickel by electrodeposition technology has been successfully developed through experiments. The substrate material used is porous open-cell foam plastic, and the conductive layer can be prepared by three methods: electroless nickel plating, vacuum nickel plating, and dipping conductive glue (palladium sol, submicron graphite emulsion, etc.), and can be pre-plated. Thick nickel is electroplated in the general sulfate nickel plating electrolyte, and then the three-dimensional network foam nickel material with excellent performance can be obtained after burning, reducing and annealing processes.

Application:

1. Battery electrode materials

Nickel foam is mainly used for battery electrode materials, especially for NiMH batteries, which are widely used in laptop computers, mobile phones, electric scooters, electric bicycles, and hybrid vehicles.

The usual operating temperature of molten carbonate fuel cells is between 550-700°C, and nickel foam can be used as an electrocatalyst for molten carbonate fuel cells.

3. Catalyst material

The unique opening structure, low-pressure input hole, inherent tensile strength and thermal shock resistance make nickel foam a catalyst carrier for automotive catalytic converters, catalytic combustion, and black smoke purifiers for diesel vehicles.

4. Other

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^{2.} Fuel cells

Nickel foam can be used as a filter material, a magnetic current conductor for magnetic particles in fluids. Other applications include applications in hydrogen storage media, heat exchange media.

0.1mm*200mm*300mm	0.2mm*200mm*300mm	0.3mm*200mm*300mm
0.5mm to 1.7mm*200mm*300mm	2mm*200mm*300mm	3 to 4mm*200mm*300mm
5mm*200mm*300mm	6mm*200mm*300mm	8mm*200mm*300mm
10mm*200mm*300mm	10 to 20mm*200mm*300mm	The size can be customized

contact us email:victory@dlx-alloy.com

Oem service:

Welcome customized size

We are experience factory for OEM&ODM service

Related Foam

Nickel Foam	Carbon Foam	Aluminium Foam	Stainles Steel Foam	Ag Foam



FAQ:

What is nickel foam?

Nickel foam is a porous metal material with a connected pore structure, similar to a sponge-like morphology.

What are the applications of nickel foam in the field of electrochemistry?

Nickel foam can be used as battery electrode materials, such as anode materials in nickel-metal hydride batteries and fuel cells.

How is nickel foam prepared?

Nickel foam is usually made by adding a foaming agent to the nickel solution, and then forming a porous structure at high temperature or room temperature through chemical reaction or electrochemical method.

