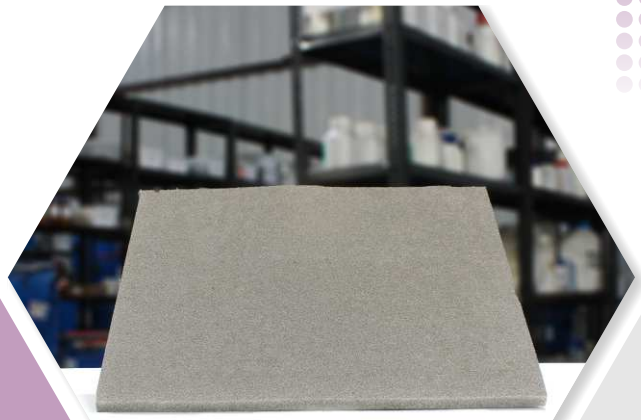
www.nanoshel.com

NANOSHEL

Nickel
Foam

Ni

99.9%



Follow us:

NS6130-10-1008E

sales@nanoshel.com

Nickel Foam

- Nickel foam is an excellent sound-absorbing material, especially at high frequencies.
- The sound absorption performance in low frequency can be improved by designing the sound absorption structure.
- Nickel foam is also one of the best electrode materials for making cadmium-nickel batteries and hydrogen-nickel batteries.
- The preparation methods of nickel foam at the present stage can be divided into liquid phase method, solid-phase method, electrodeposition method, and gas-phase method, etc
- Nickel foam possesses lightweight, high porosity, exceptional uniformity, and intrinsic strength.
- It also exhibits properties for instance corrosion resistance, good electrical and thermal conductivity.
- Moreover, it exhibits a high density, good porosity, thermal stability, and good gas distribution characteristics.
- It shows various properties such as low-pressure drop, intrinsic strength, unique open cell structure, resistant to thermal shock, etc.
- Alluring porous structure and the microstructures tailorable over the range 40 to 80% porosity
- High stiffness-to-weight and strength-to-weight ratios
- Ability to absorb energy from an impact, crash, and explosive blasts
- Vibration damping and sound absorption
- Fire resistance and thermal insulating properties

Additional Characteristics

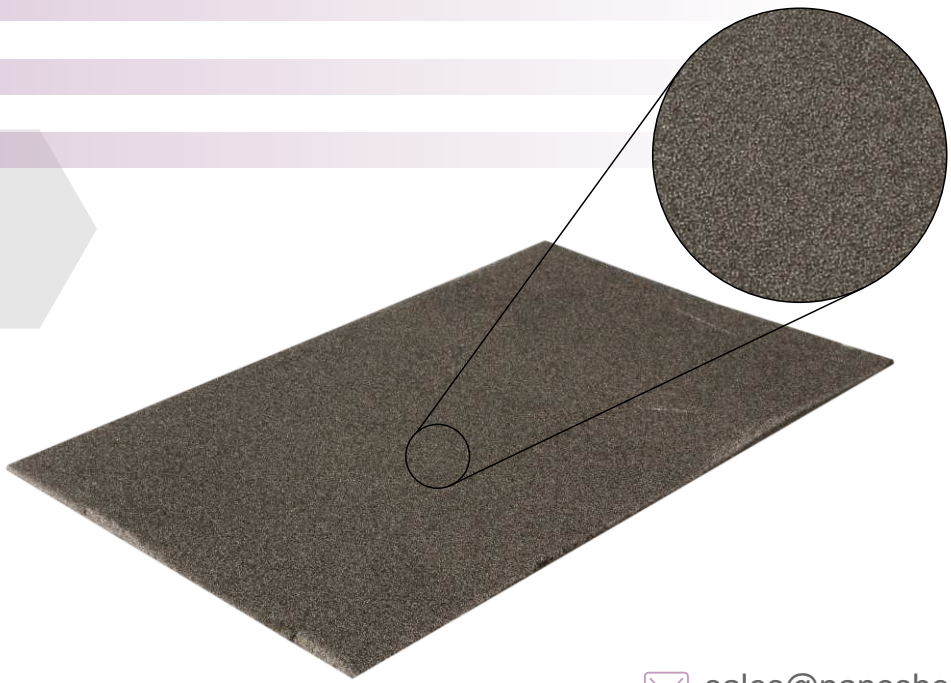
Stock No.	Purity	Pore Size	Thickness	Dimension
NS6130-10-1008E	99.9%	0.1~6 mm	1.6 mm	300mm X 166mm

Properties of Foam

The key properties of metal foam are as follows:

- Ultralight material (75-95% of the volume consists of void spaces)
- Very high porosity
- High compression strengths combined with good energy absorption characteristics
- Thermal conductivity is low
- High stiffness
- High melting point
- Better damping
- Thermal insulation

Purity
99.9%



sales@nanoshel.com

Nickel

CHARACTERISTICS OF METAL FOAMS

Ultra-lightweight aluminum foams possess unique microstructural characteristics and physical properties that make them attractive for automotive, as well as other applications:

- Ultra-lightweight foam

Applications Of Nickel Foam

- High temperature resistant ultra-light structure
- Dominant packaging material
- High-grade decorative material
- Efficient substrate and supportive for electrode material
- Condenser heat exchange material
- Chemical catalyst carrier material
- Floor damping material
- Foams blot up the sound, vibrations and shocks
- Works as a shielding material
- Used as the base plate of positive electrode in Ni-MH / Ni-Cd battery
- Filtration materials of air / oil / smoke
- Porous electrode in Galvano-Chemistry Engineering
- As catalyst support for automotive catalytic converters
- In future, utilized as bipolar plate enhancement material for proton exchange membrane fuel cells

Ni

ISO 9001:2015
CERTIFIED COMPANY

20ZICE4589C 19ZAZGO1274G 20ZICE4588M

INTELLIGENT MATERIALS PVT LTD
Derabassi
Punjab (140507)
INDIA
+91 9779 550077, 9779238252

NANOSHEL UK LIMITED
Chapel House,
Chapel St Cheshire,
CW12 4AB United Kingdom
+44 1782 454 144, +44 74 105 48802

NANOSHEL LLC
3422 Old Capitol Suit
1305 Wilmington DE - 19808
United States
+1 646 470 4911