



Metal Organic Framework

















Metal Organic Framework

Metal-organic frameworks (MOFs) with adjustable structures and large surface areas are attracting ever-increasing attention in the field of next-generation energy storage. Metal-organic frameworks (MOFs) are porous solids with high surface areas, permanent porosities, good thermal and chemical stabilities, and customizable chemistry and functionality. Because of these excellent properties, MOFs have been studied in a large variety of fields, such as catalysis, luminescence science, medical applications, membrane technology, and gas storage, separation, and purification.

Quick Facts

Stock No. : NS6130-12-001905

CAS : 7440-02-0

Purity: 99 %

APS : 200nm-5µm

Molecular Formula : C14H16N2O8Ni2

Molecular Weight : 457.6 g/mol

Form : Powder



Properties

- → Large Surface Area
- High degree of crystallinity
- → Low density
- → Uniform channels
- → Porosity
- → High thermal stability
- → Chemical tailor ability



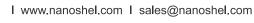
Metal Organic Framework











Applications



Food

- of ripening agents)



Gas storage

- Compressed gas storage (e.g.
- Carbon capture and sequestration



Conductivity



Catalysis



Sensoring and detection

- Gas/vapor and small molecule detection
- Luminescence (e.g. scintillation)
- Medical diagnostics
- Explosive detection



Gas Treatment

- Separation (e.g. hydrocarbons, CO2, O2,
- Impurity and odor removal
- Filtering (e.g. molecular sieves)



Textile upgrading

- Personal protection
- Chemical, biological, radiological and nuclear (CBRN) defense



Gas and liquid adsorption

- Drug Delivery (e.g. slow release of

- Heat transformation (e.g. adsorption







ISO 9001:2015 CERTIFIED COMPANY

INTELLIGENT MATERIALS PVT LTD

Derabassi Punjab (140507) INDIA

NANOSHEL UK LIMITED

Chapel House, Chapel St Cheshire, CW12 4AB United Kingdom

NANOSHE LLC 3422 Old Capitol Suit 1305 Wilmington DE - 19808 United States











