

Technical Data Sheet of Cu-BTC



Basic Information and Product Property

Chemical Name: Cu-BTC

Product Number: MOFCU199.010.01

CAS-NO: 51937-85-0

Synonyms: HKUST-1, MOF199, Copper benzene-1, 3, 5-tricarboxylate

Unit Molecular Formula: $C_{18}H_6Cu_3O_{12}$

Unit Molecular Weight: 604.87 g/mol

Appearance: Blue Powder

BET surface area (m^2/g): ≥ 1600

Coordination Metal: Cu

Linker: 1, 3, 5-Benzenetricarboxylic acid (BTC)

Applications

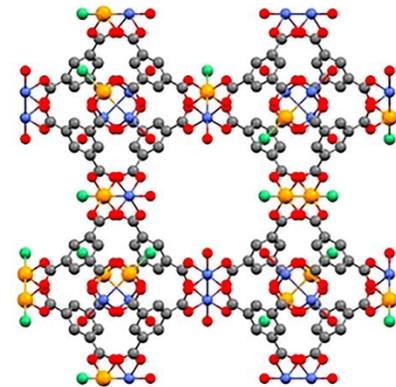
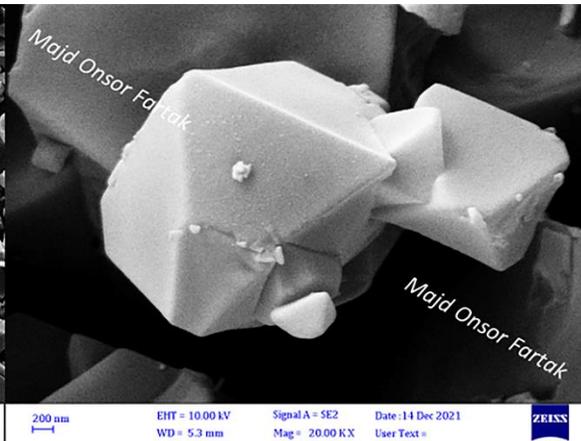
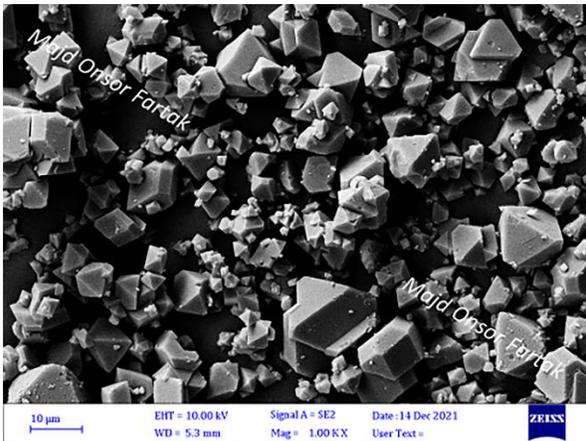
- 1) Gas adsorption separation and storage
- 2) Catalysts
- 3) Optical, electrical and magnetic materials

Stability and Preservation

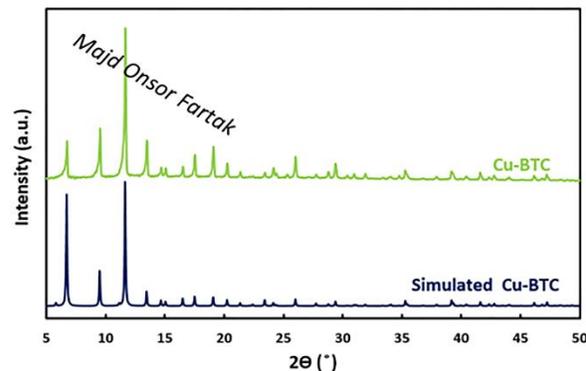
Cu-BTC is stable in air, instable in aqueous conditions

Keep sealed in dry and cool condition

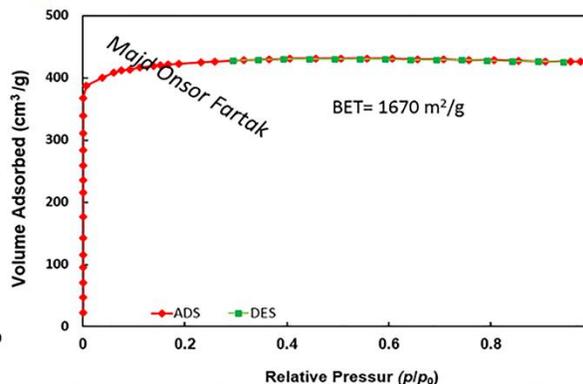
It is recommended to activate for 5 hours at $150^\circ C$ in vacuum



Typical SEM Image of Cu-BTC



XRD Analysis of Cu-BTC



N_2 Sorption Isotherm of Cu-BTC

