

Catalog # 30-4015 Zinc 2-methylimidazole MOF (ZIF-8)

Technical Notes:

1. Use of ZIF-8 in the separation of alkanes, alkenes and aromatics
 - a. Separation of xylene isomers
Micropor. Mesopor. Mat., **2013**, 173, 1.
 - b. Separation of C6 Paraffins
Ind. Eng. Chem. Res., **2012**, 51, 4692.
 - c. Effective separation of propylene/propane binary mixtures
J. Membrane Sci., **2012**, 390-391, 93.

2. Use of ZIF-8 as a catalyst and catalyst-support
 - a. Catalytic activity of ZIF-8 in the synthesis of styrene carbonate
Chem. Commun., **2013**, 32, 36.
 - b. Iridium nanoparticles stabilized by metal organic frameworks: synthesis, structural properties and catalytic performance
Dalton Trans., **2012**, 41, 12690.
 - c. Zeolitic imidazole frameworks: Catalysts in the conversion of carbon dioxide to chloropropene carbonate
ACS Catalysis, **2012**, 2, 180.
 - d. Expanding applications of metal-organic frameworks: zeolite imidazolate framework ZIF-8 as an efficient heterogeneous catalyst for the Knoevenagel reaction
ACS Catalysis, **2011**, 1, 120.

3. Use of ZIF-8 in gas purification
 - a. MOF-containing mixed-matrix membranes for CO₂/CH₄ and CO₂/N₂ binary gas mixture separations
Sep. Purif. Technol., **2011**, 81, 31.
 - b. Porous polyethersulfone-supported Zeolitic Imidazolate Framework Membranes for hydrogen separation
J. Phys.Chem. C., **2012**, 116, 13264.