

n-Butane/1-Butene Separation Using a Mesoporous MCM-41

김성수, 강민¹, 이형익, 고창현², 김종남², 김지만*
성균관대학교 화학과; ¹EnD Solutions co.,Ltd.;
²한국에너지기술연구원
(jimankim@skku.edu*)

1-butene is produced through separation processes from C4 fractions in the naphtha cracking center of a petrochemical plant. The discovery of ordered mesoporous silica, MCM-41, has generated tremendous interest in the field of catalysis, separation science and advanced materials. There have been a lot of works in order to develop an excellent adsorbent for separation of olefin and paraffin.

In the present work, the adsorption characteristics of mesoporous MCM-41 containing silver ion for 1-butene and n-butane were studied. The adsorption ability for the 1-butene depending on thermal treatment were also investigated.