

Importance of Structural and Sources of Activated Carbon Surfaces for Adsorption of Dibenzothiophene

Kavitha, 임설희, 이창하*
연세대학교
(leech@yonsei.ac.kr*)

The performance of various activated carbons obtained from different carbon precursors as adsorbents for the desulfurization of liquid phase was evaluated. Sulfur compounds have been removed using different types of adsorbents either synthetic and/or natural adsorbent. Activated carbon is particles of carbon that have been to increase their surface area and increase their ability to adsorb a wide range of contaminants. Activated carbon is particularly good at adsorbing organic compounds. Activated carbon can be made from substances containing high carbon content of coconut and coal. The raw material has a very large influence on the characteristics and performance of activated carbon. There are three main forms of activated carbon such as granular activated carbon, powdered activated carbon and pellet type activated carbon. The experimental results indicated that coconut based granular activated carbon shows the good adsorption capacity of dibenzothiophene (DBT). Depending on the sources and shape of the carbon used, the adsorption capacity of the activated carbon significantly varied.