

숯의 유형에 따른 물리화학적 특성 및 H₂S의 흡착평형

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Absorption of H₂S and physicochemical properties of charcoal was investigated using various charcoals such as hard charcoal, fine charcoal made of bamboo, and charcoal made of bamboo. The properties of various charcoal were analyzed using BET, SEM and pH meter and absorption experiment for H₂S was carried out to determine the absorption equilibrium in the batch reactor. As results of analysis for properties, the pHs were arranged in order of hard charcoal > charcoal made of bamboo > fine charcoal made of bamboo. The pH of original sample was the highest and pH of desorption sample was lower than that of absorption sample. It was also found that adsorption equilibriums of fine charcoal made of bamboo and charcoal made of bamboo were higher than hard charcoal. Therefore, fine charcoal made of bamboo and charcoal made of bamboo can be applied more efficiently than hard charcoal to remove the odor such as H₂S by adsorption in the atmosphere at the normal temperature.