

Catalytic activity of cobalt oxide loaded on high surface sumectite for thiophene hydrodesulfurization. Hayashi, E.; Iwamatsu, E.; Yamamoto, Y.; Sanada, Y.; Yoneda, T.; Biswas, M. E.; Ali, S. Ahmed; Lee, A.; Hamid, H.. Advanced Catalysts Research Laboratory, Petroleum Energy Center, Kanagawa, Japan. Book of Abstracts, 213th ACS National Meeting, San Francisco, April 13-17 (1997), PETR-072. Publisher: American Chemical Society, Washington, D. C CODEN: 64AOAA Conference; Meeting Abstract written in English. AN 1997:162993 CAPLUS (Copyright (C) 2008 ACS on SciFinder (R))

Abstract

Catalysts of cobalt oxide loaded on sumectite having high surface area are prepd. and tested on thiophene hydrodesulfurization activity (HDS). Sumectite clays (montmorillonite, saponite, porous saponite, hectorite and stevensite) were used as supports. The catalysts were tested on HDS activity for thiophene by means of pulse reaction. Co-porous saponite catalyst in the series shows a highest thiophene HDS activity so far studied. It appears that the kind of sumectite and the structure have a strong influence on the catalytic activity. The catalysts were characterized by Temp. - Programmed Sulfiding (TPS) method and ESR. Redn. and sulfiding conditions of loaded Co were discussed.