

# **High Surface Area Smectite Supported Cobalt Oxides As Active Catalysts**

## **For Thiophene Hydrodesulfurization**

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### **Summary**

Cobalt oxide loaded on high surface area smectites are prepared and tested in a pulse flow reactor for thiophene hydrodesulfurization (HDS). Smectites used were montmorillonite, saponite, porous saponite, hectorite and stevensite. Go-porous saponite showed the highest activity among Co-smectites, CoAl<sub>2</sub>O<sub>3</sub>, and GoMo/Al<sub>2</sub>O<sub>3</sub> so far studied. It suggests that the property of smectite has an influence on the catalyst activity.

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