

# **Benzene Reduction In Reformate: A Review Of Current Catalytic Studies**

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**ARABIAN JOURNAL FOR SCIENCE ENGINEERING, ARABIAN JOURNAL FOR SCIENCE AND ENGINEERING; pp: 181-192; Vol: 21**

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## **Summary**

The purpose of this paper is to review recent studies on catalytic conversion of benzene in reformate by hydrogenation, hydroisomerization, and alkylation. Refineries throughout the world are facing challenges in meeting new fuel specifications; one of them is benzene content in motor gasoline. Almost all the proposed benzene reduction processes are within the naphtha processing area, since the reformate is the major source of benzene (typically in the range 2.5-8.0 vol.%), as well as the major component in the gasoline pool. The catalytic conversion approach discussed in this paper is the most flexible one since it allows accurate monitoring of the benzene without altering the operation of the reformer unit. The present paper also briefly compares the costs of various benzene reduction options and their impact on refinery economics.

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