

PROCESS FOR DEHYDROGENATION OF NORMAL PARAFFINS TO OLEFINS

ABSTRACT

Processes for dehydrogenating normal paraffins derived from natural oils to olefins are described. The feed stream is passed through an adsorption bed comprising alkaline or alkaline earth cation exchange X-Zeolite to remove essentially all oxygenates and aromatics from the feed stream. One or more additional adsorbent beds having different adsorbents can also be included to remove additional oxygenates and aromatics as well as sulfur compounds, nitrogen compounds, phosphorous compounds, or combinations thereof. The dehydrogenation process can be part of a process for producing alkylbenzenes from natural oils.

[Figure 1]