

DEHYDROGENATION PROCESS

ABSTRACT

In a process for the dehydrogenation of at least one dehydrogenatable hydrocarbon, at least one dehydrogenatable hydrocarbon selected from an oxygen-containing six-membered carbon ring compound is supplied to a first dehydrogenation reaction zone together with at least one stabilizing compound selected from a non-oxygen-containing six membered carbon ring compound to the first dehydrogenation reaction zone, such that the weight ratio of the stabilizing compound to the dehydrogenatable hydrocarbon supplied to the first dehydrogenation reaction zone is in the range of from 1:200 to 200:1. The dehydrogenation feed stream and the at least one stabilizing compound are contacted with a first dehydrogenation catalyst in the first dehydrogenation reaction zone under dehydrogenation conditions to convert at least a portion of the dehydrogenatable hydrocarbon into an unsaturated six-membered carbon ring compound and hydrogen.

(Figure 1)