

A B S T R A C T

PROCESS FOR THE CATALYTIC PARTIAL OXIDATION OF
HYDROCARBONS

A process for the catalytic partial oxidation of a hydrocarbon feedstock comprises contacting a feed comprising the hydrocarbon feedstock, an oxygen-containing gas and, optionally, steam at an oxygen-to-carbon molar ratio in the range of from 0.45 to 0.75, at elevated pressure with a catalyst in a reaction zone under adiabatic conditions, which catalyst comprises a metal selected from Group VIII of the Periodic Table supported on a carrier and which catalyst is retained within the reaction zone in a fixed arrangement having a high tortuosity. The fixed arrangement of the catalyst is preferably a fixed bed of a particulate catalyst or a ceramic foam.