

A B S T R A C T

PROCESS FOR UPGRADING A PARAFFINIC FEEDSTOCK

Process for upgrading a paraffinic feedstock comprising:

- a) supplying the feedstock and an olefins-containing stream at a paraffin to olefin ratio greater than 2 v/v to a reactor containing a zeolite-beta catalyst and
- b) removing the upgraded product wherein the process is operated at an olefin conversion of at least 90 mol% in an external circulation reactor having an extent of external circulation of liquid reactor content expressed as

$$\frac{\phi_{vc} + \phi_v}{\phi_v}$$

of greater than 2

wherein

ϕ_v is the volumetric flow rate of feedstock and olefins-containing stream and ϕ_{vc} is the volumetric external circulation flow rate, and upgraded products produced by the process.