

10202000058X

Text of the abstract

The invention relates to a catalyst for a process for removing mercaptans and optionally disulfides (if present) from hydrocarbon stream, in particular C4 streams, in the presence of higher dienes, in particular C5 dienes, wherein the catalyst is a shell catalyst comprising alumina, silica gel or activated carbon as support material, and palladium and platinum as catalytically active metals, wherein the catalyst has a palladium concentration of up to 2.0% by weight, a platinum concentration of up to 1.0% by weight and a total metal dispersion of at least 70%. The invention also relates to a process for removing mercaptans and disulfide (if present) from hydrocarbon streams, in one embodiment in the presence of 1-butene, by thioetherification of the mercaptans with polyunsaturated hydrocarbons, wherein the process is carried out in a reactor with an addition of hydrogen in the presence of higher dienes, in particular C5 dienes.