

METHOD FOR PRODUCING HYDROCARBON MATERIAL

Abstract

Provided is a method for producing a hydrocarbon material from C5 raffinate that is obtained as extraction residue oil by removing at least some of isoprene from the C5 distillate fraction, which is by-produced during the production of ethylene by thermal decomposition of naphtha and is mainly composed of an organic compound having 5 carbon atoms, by extractive distillation. The method for producing a hydrocarbon material is characterized by comprising: a vapor phase thermal decomposition step wherein the C5 raffinate is gasified and at least some of diolefins having 10 carbon atoms and contained in the gasified C5 raffinate are thermally decomposed; a desulfurization step wherein at least some of the sulfur-containing component, which is contained in the gasified C5 raffinate after the vapor phase thermal decomposition step, is removed in a vapor state after the vapor phase thermal decomposition step; and a hydrogenation step wherein a hydrocarbon material having a total concentration of diolefins and olefins of 0.5% by weight or less is obtained by hydrogenating at least some of carbon-carbon double bonds of the diolefins and/or the olefins contained in the gasified C5 raffinate after the desulfurization step in a vapor state after the desulfurization step.

(No Suitable Figures)