

Title (en)
METHOD FOR PRODUCING PROPENE FROM PROPANE

Title (de)
VERFAHREN ZUR HERSTELLUNG VON PROPEN AUS PROPAN

Title (fr)
PROCEDE DE PRODUCTION DE PROPENE A PARTIR DE PROPANE

Publication
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Application
EP 06708626 A 20060303

Priority

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Abstract (en)
[origin: WO2006094938A2] The invention concerns a method for producing propene from propane, said method consisting in: A) preparing an input gas stream (a) containing propane; B) introducing the input gas stream (a), containing propane, optionally water vapour and optionally an oxygen-containing gas stream, into a dehydrogenation zone then dehydrogenating propane to form propene, a product gas stream (b), containing propane, propene, methane, ethane, ethene, nitrogen, carbon monoxide, carbon dioxide, water vapour, optionally hydrogen and optionally oxygen, being obtained; C) cooling and optionally compressing the product gas stream (b) then separating water vapour by condensing a product gas stream (c) depleted in water vapour (c) being obtained; D) separating the non-condensable gas constituents or with low boiling point by contacting the product gas stream (c) with an inert absorbent then by desorbing the gases dissolved in said inert absorbent, a C₃ hydrocarbon stream (d1) and a residual gas stream (d2) containing methane, ethane, ethene, nitrogen, carbon monoxide, carbon dioxide, optionally hydrogen and optionally oxygen, being obtained; E) cooling and optionally compressing the C₃ hydrocarbon stream (d1), a gaseous or liquid C₃ hydrocarbon stream (e1) being obtained; F) optionally introducing the C₃ hydrocarbon stream (e1) into a first distillation zone then separating same by distillation into a propane and propene stream (f1) and a stream (f2) containing ethane and ethene; G) introducing the stream (e1) or (f1) into a (second) distillation zone then separating by distillation into a propene stream (g1) and a propane stream (g2), the stream (g2) being recycled at least partly to the dehydrogenation zone.

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