

Title (en)
MODIFIED METHOD FOR PRODUCING HIGHER ALPHA-OLEFIN

Title (de)
MODIFIZIERTES VERFAHREN ZUR HERSTELLUNG HÖHERER ALPHA-OLEFIN

Title (fr)
PROCEDE MODIFIE DE PRODUCTION D'ALPHA-OLEFINES SUPERIEURES

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Application
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Abstract (en)

[origin: WO02066406A1] The invention relates to a method for selective production of linear alpha -olefins having a carbon number ranging from 6 20, comprising the following steps: a) reaction of a linear, internal olefin or a mixture of linear, internal olefins having a carbon number of $(n/2) + 1$, wherein n is the carbon number of the desired linear alpha -olefin, in a transalkylation with a trialkyl aluminium compound in isomerizing conditions, wherein an olefin corresponding to the alkyl radical is released and the linear olefin thus added becomes attached to the aluminium during isomerization and the formation of a corresponding linear alkyl aluminium compound; b) reaction of the formed linear alkyl aluminium compound with an olefin upon release of the corresponding linear alpha olefin having a carbon number of $(n/2) + 1$ and formation of a trialkyl aluminium compound, c) introduction of the formed linear alpha -olefin into a self methathesis reaction, wherein a linear internal olefin having the desired carbon number n is formed, d) reaction of the formed olefin having a carbon number n with a trialkyl aluminium compound in isomerizing conditions, wherein an olefin corresponding to the alkyl radical is released and the linear, internal olefin becomes attached to the aluminium upon isomerization and formation of a corresponding linear alkyl aluminium compound e) reaction of the formed linear alkyl aluminium compound with an olefin upon release of the linear alpha -olefin having the desired carbon number n and formation of a trialkylaluminium compound; f) isolation of the desired linear alpha -olefin having a carbon number n.

[origin: WO02066406A1] The invention relates to a method for selective production of linear alpha -olefins having a carbon number ranging from 6 20, comprising the following steps: a) reaction of a linear, internal olefin or a mixture of linear, internal olefins having a carbon number of $(n/2) + 1$, wherein n is the carbon number of the desired linear alpha -olefin, in a transalkylation with a trialkyl aluminium compound in isomerizing conditions, wherein an olefin corresponding to the alkyl radical is released and the linear olefin thus added becomes attached to the aluminium during isomerization and the formation of a corresponding linear alkyl aluminium compound; b) reaction of the formed linear alkyl aluminium compound with an olefin upon release of the corresponding linear alpha olefin having a carbon number of $(n/2) + 1$ and formation of a trialkyl aluminium compound, c) introduction of the formed linear alpha -olefin into a self methathesis reaction, wherein a linear internal olefin having the desired carbon number n is formed, d) reaction of the formed olefin having a carbon number n with a trialkyl aluminium compound in isomerizing conditions, wherein an olefin corresponding to the alkyl radical is released and the linear, internal olefin becomes attached to the aluminium upon isomerization and formation of a corresponding linear alkyl aluminium compound e) reaction of the formed linear alkyl aluminium compound with an olefin upon release of the linear alpha -olefin having the desired carbon number n and formation of a trialkylaluminium compound; f) isolation of the desired linear alpha -olefin having a carbon number n.

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