

PROCESS FOR PRODUCING AN ALKYLATED,
NON-OXYGEN-CONTAINING AROMATIC HYDROCARBON

ABSTRACT

5 An alkylated aromatic hydrocarbon is produced having the following
properties: (a) less than 40 wt.% of the alkylated aromatic hydrocarbon is
2-aryl; and (b) at least 20 wt.% of the alkylated aromatic hydrocarbon is a
monoalkylate. That alkylated aromatic hydrocarbon is produced by
isomerizing a normal alpha-olefin having from 20 to 28 carbon atoms in the
presence of a first acidic catalyst to produce a partially-branched, isomerized
10 olefin, then either benzene or toluene is alkylated with the partially-branched,
isomerized olefin in the presence of a second solid, acidic catalyst. The first
acidic catalyst can be a molecular sieve with a one-dimensional pore system.
The second acidic catalyst can be a zeolite Y having a silica to alumina ratio
of at least 40:1.

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