

BIORENEWABLE KEROSENE, JET FUEL, JET FUEL BLENDSTOCK, AND METHOD OF MANUFACTURING

ABSTRACT

The present technology provides compositions that include at least about 98 weight percent (“wt%”) n-paraffins which, among other surprising features, may be suitable for use as a diesel fuel, an aviation fuel, a jet fuel blendstock, a blendstock to reduce the cloud point of a diesel fuel, a fuel for portable heaters, and/or as a charcoal lighter fluid. The composition includes at least about 98 wt% C₇-C₁₂ n-paraffins, where at least about 10 wt% of composition includes n-decane, at least about 20 wt% of the composition includes n-dodecane, and at least about 75 wt% of the composition includes even carbon number paraffins. The composition also includes less about 0.1 wt% oxygenates and less than about 0.1 wt % aromatics. The composition may be produced by a process that includes hydrotreating a biorenewable feedstock comprising at least one of palm kernel oil, coconut oil, babassu oil, microbial oil, or algal oil.

No figure