CLAIMS

1. A method for producing a multipurpose fuel composition having a freezing point of –40°C or below, and a cetane number more than 40, preferably more than 45, more preferably more than 50, wherein in the method the multipurpose fuel composition is obtained by mixing petroleum derived jet fuel and renewable jet fuel,

wherein the renewable jet fuel has a distillation range

from 145°C to 315°C, from 145 °C to 280 °C, or from 180 °C to 315 °C,

wherein the petroleum derived jet fuel has a freezing point between –47°C and –60°C,

wherein the difference between the freezing point of the renewable jet fuel and the freezing point of the petroleum derived jet fuel is less than 25°C,

such that the multipurpose fuel composition is usable as diesel fuel and as jet fuel,

wherein the renewable jet fuel has an iso-paraffin content of more than 70 wt-%, preferably more than 80 wt-%, more preferably more than 90 wt-%,

wherein the renewable jet fuel contains

more than about 70 wt-% of C15 to C18 paraffins, preferably more than about 85 wt-%, more preferably more than about 90 wt-%;

less than about 20 wt-% of paraffins smaller than C15 paraffins, preferably less than about 10 wt-%, more preferably less than about 7 wt-%; and/or

less than about 10 wt-% of paraffins larger than C18 paraffins, preferably less than about 5 wt-%, more preferably less than about 3 wt-%;

wherein the renewable jet fuel is a jet fuel produced from biological sources and/or waste fat by means of hydrogenation, hydrodeoxygenation, hydrodesulfurization, hydrodenitrification, hydrodemetallization, hydrocracking and/or isomerization;

wherein the composition comprises at least 1 vol-% of renewable jet fuel.

2. A method as claimed in claim 1, wherein the freezing point of the composition is less than –47°C.

3. A method as claimed in claim 1 or 2, wherein the freezing point of the composition is –55°C or below, preferably –55.2°C or below, more preferably

–55.6°C or below, yet more preferably –55.9°C or below, yet more preferably –57.4°C or below, yet more preferably –58.2°C or below.

4. A method as claimed in any of claims 1-3, wherein the composition comprises at least 5 vol-% of renewable jet fuel, preferably at least 10 vol-%, more preferably at least 15 vol-%, yet more preferably at least 15 vol-%, yet more preferably at least 50 vol-%.

5. A method as claimed in any of claims 1-4, wherein the renewable jet fuel is jet fuel produced from vegetable oil, animal fat, fish fat, palm oil, rapeseed oil, cooking oil, waste fat from the food industry, biogas, algae oil, jatropha oil, soybean oil, and/or microbial oil.