

# Sustainable Aviation Fuel Supply Chain

AmSpec ensures the quality of renewable feedstocks through specialized chemical and physical analysis and contamination detection.

Renewable materials such as oils, fats, greases, biomass, and waste are sourced and collected.

## COLLECT FEEDSTOCK



## CONVERT TO SBC



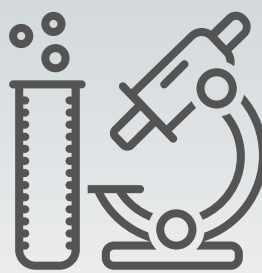
Feedstocks are processed into the desired Synthetic Blending Component (SBC), the essential building block of SAF, through one of eight ASTM D7566 approved pathways (e.g., HEFA, ATJ, FT).

AmSpec's tailored testing solutions ensure SAF developers meet pathway-specific challenges, enhancing and ensuring compliance with ASTM D7566.

AmSpec conducts rigorous testing of SBC, verifying critical properties like hydrocarbon composition, acidity, distillation, and unconverted FAME content to ensure it is ready to be blended with conventional jet fuel.

Each SBC is tested against detailed batch requirements from the specific ASTM D7566 Annex (Table AX.1) that applies to ensure safety, performance, and compatibility. Changes in feedstock, processes, or equipment trigger management of change requirements from Table AX.2 to maintain compliance and operational stability.

## TEST SBC



## BLEND SBC WITH JET FUEL



The SBC is blended with ASTM 1655 Certified Jet Fuel (up to 50% depending on the annex), creating Sustainable Aviation Fuel.

AmSpec analyzes SBC for key properties to help our clients optimize blending to ensure compliance with ASTM D7566.

AmSpec performs ASTM D7566 testing on blended SAF, evaluating safety standards, performance metrics, chemical composition, and system durability ensuring compliance and reliability.

The blended fuel is certified by testing against ASTM D7566 Table 1 and then reclassified as ASTM D1655 jet fuel, ensuring that it meets the same safety and performance standards as conventional jet fuel.

## TEST, CERTIFY & RECLASSIFY



## SAF POWERS FLIGHT



Certified SAF is transported via pipelines, trucks to airports, where it fuels aircraft, reducing GHG emissions by up to 80%.

AmSpec supports SAF distribution by ensuring that the quality of the fuel is maintained through the transport and aircraft fueling process, powering greener aviation globally.