

Download Fuel Combustion : A Source Book

Solid fuel refers to various types of solid material that are used as fuel to produce energy and provide heating, usually released through combustion. Solid fuels include wood, charcoal, peat, coal, hexamine fuel tablets, and pellets made from wood (see wood pellets), corn, wheat, rye and other grains. Solid-fuel rocket technology also uses solid fuel (see solid propellants). Hydrogen fuel is a zero-emission fuel when burned with oxygen. It can be used in electrochemical cells or internal combustion engines to power vehicles or electric devices. It has begun to be used in commercial fuel cell vehicles such as passenger cars, and has been used in fuel cell buses for many years. It is also used as a fuel for the propulsion of spacecraft.

1.2. Historical use of methanol as an engine fuel. From the early days of the spark ignition engine, means to extend what is now referred to as the octane rating of fuels was sought, and the early development of octane enhancers such as aniline compounds and ultimately tetraethyl lead (TEL) was begun.

Fuel Temperature. Limitations: Max fuel temp $+49^{\circ}\text{C}$, Min fuel temp -45°C or freezing point $+3^{\circ}\text{C}$, whichever is higher. Typical freezing point of Jet A1 is -47°C . If the fuel temp is approaching the lower limits you could descend into warmer air or accelerate to increase the kinetic heating.