

Learning Activity

Products of Incomplete Combustion



Match the propane combustion ratio to its correct description. *Check your work on page 251.*

ANSWER

LEAN BURN

The leanest gas-air mixture that will support combustion. This ratio will cause appliances to operate inefficiently and eventually stop burning.

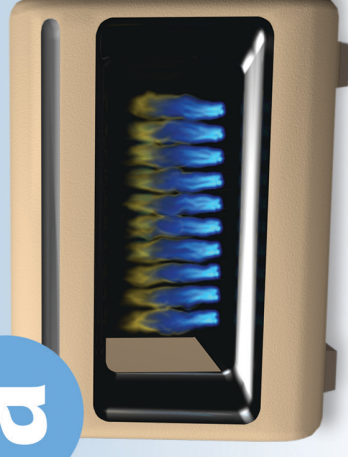
IDEAL BURN

The ideal gas-air mixture for efficient combustion. Products of complete combustion include water vapor and carbon dioxide, which are produced by a ratio of 1 part propane to 24 parts air plus an ignition temperature of 920°F.

RICH BURN

The most dangerous gas-air mixture to support combustion. Products of incomplete combustion include soot, excessive water vapor, aldehydes, and carbon monoxide, a highly toxic gas.

a



4.0% PROPANE

b



9.6% PROPANE

c



2.15% PROPANE