

# What's the Difference between Liquefied Petroleum Gases and Flammable Liquids? – Ask The Expert



The differences between LPGs and flammable liquids are of critical importance for storage safety.

## QUESTION

Is there any difference between a liquefied petroleum gas (LPG) and a flammable liquid?

## ANSWER

Yes, and the differences are of critical importance for storage.

## EXPLANATION

LPGs aren't flammable liquids but flammable liquefied gases. Specifically, an LPG is a flammable mixture of hydrocarbon gases (butane, iso-butane, propane, propylene, butylene and other hydrocarbons of low molecular weight refined from petroleum) used as a fuel in heating vehicles and appliances. LPGs exist both as a liquid and a gas at 20°C (68°F).

Because LPGs are usually denser than ambient air, they flow to the ground like a liquid when there's little air movement. **Result:** LPGs may accumulate in lower areas like basements and pits and remain there for long periods of time if they can't flow away. This leads to the formation of potential ignitable concentrations. Accordingly, LPGs are stored within pressurized containers.

Flammable liquids, by contrast, are stored in flammable liquid storage cabinets designed to protect flammable liquid containers from fire for 10 minutes to allow for safe evacuation. Because LPGs evolve much more rapidly, there's usually not enough time to evacuate when they leak.