

LPG is a viable alternative gaseous fuel (also known as "Auto gas") which is a gas product of petroleum refining primarily consisting of propane, propylene, butane and other light hydrocarbons [7–9]. The engine, which uses conventional diesel fuel and LPG fuel, is referred to as 'LPG–Diesel dual fuel engine'. In contrast, the low cetane number of LPG makes it difficult to be used in large proportions in compression ignition engines, mainly due to high cyclic variation [10,11,101]. LPG has high calorific value compared to other gaseous fuels and also it has high octane number but a low cetane number. The high octane number of LPG makes it suitable for spark ignition engines. Hence it can be used in the CI engine in the dual fuel mode only and in this mode it has been extensively studied. So, storage and transportation of LPG is easier than other gaseous fuels. It can be liquefied in a low pressure range of 0.7–0.8 Mpa at atmospheric temperature. It leads to better performance, low particulate and smoke emissions [12].