

SUMMARY

Gasoline is a volatile substance that is composed of many hydrocarbons and other ingredients called additives. The method of gas chromatography is most commonly used for the analysis of gasoline. It is suitable for separation of hydrocarbons contained in gasoline and also for their comparison.

The task of this bachelor thesis was to compare different types of gasoline based on the separation of individual hydrocarbons by gas chromatography with flame ionization detector (GC-FID). At first, the knowledge about the method of gas chromatography and the composition and properties of gasoline was necessary to achieve. Secondly, the determination of experimental conditions (temperature program) for proper separation of hydrocarbons and comparison of selected gasoline were obtained.