

Comparison of Benzene and Its Alkylated Derivates Profiles in Car's Fuels, Engine Exhaust Gases and in Air in the Vicinity of Communication Arteries – Magdalena Żak, Jan Koniecznyński

Summary

Main sources of emission of benzene and its alkylated derivatives to the atmospheric air, particularly the vehicular ones, are characterized in the paper. Growing use of fuels, especially unleaded gasoline, leads to emission of considerable amounts of these aromatic hydrocarbons. The paper presents and discusses results of determinations of the content of benzene and its alkylated derivatives in engine fuels. Also emission factors of these hydrocarbons from commonly used in Poland types of cars, both with spark- and self-ignition engines, are considered. Profiles of investigated hydrocarbons in fuels and exhaust gases were determined. Respectively compared profiles proved the motor vehicles responsible for main part of the benzene and its alkylated derivatives in air in the vicinity of communication arteries.