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ALTERNATIVE FUELS BASED ON COKE CHEMISTRY PRODUCTS

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The article examines the types of liquid alternative motor and furnace fuels that are manufactured using products and waste from the coke-chemical, chemical, and petrochemical industries. It is shown that the interest in alternative (renewable) types of fuels in world practice is explained, first of all, by the solution of a number of environmental problems, since these types of fuels make it possible to reduce greenhouse gas emissions, the consumption of petroleum products, and the use of combustible fossils. Mixtures containing 5-15 % alcohol and 85-95% gasoline, as well as oxygenated fuels containing various oxygen-containing substances (alcohols, ethers, aldehydes, etc.) have become widespread as alternative automotive fuels. The most common additive is bioethanol, which is obtained from vegetable raw materials by fermentation. Liquid alternative furnace and boiler fuel is used for burning in power plants, boilers, etc. Such fuels can be made from many secondary petroleum products, waste oils, diesel fuel and non-liquid fuel oil, as well as using combustible liquid non-target by-products, non-liquid products and tarry waste from the coke and chemical industry.

The article provides a list of boiler and furnace fuels with an indication of the technical conditions currently in force in Ukraine, and raw materials for their preparation. The principle technological diagram of the method of obtaining a mixed alternative boiler fuel developed by SE "UKHIN" is provided. The process includes the following main stages: reception and preparation of raw materials; production of boiler (stove) fuel; quality control; paperwork; packaging and labeling; shipment of the finished product.

Key words: motor fuel, furnace fuel, secondary products, waste, mixed fuel, technical conditions, alternative mixed boiler fuel, technological scheme.

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