

PYROLYSIS DISTILLATE

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Abstract: *This article presents thoughts and opinions about pyrolysis distillate.*

Key words: *Piezolysis, temperature, natural gas, carbohydrate, polymer, gasoline, raw materials, fuel and energy.*

Pyrolysis is the decomposition of organic compounds at high temperatures. Characteristic reactions of pyrolysis: breaking of carbon-carbon bonds, dehydrogenation, polymerization, isomerization, condensation. Industrially important pyrolysis raw materials include oil products, wood, coal, petroleum gases and natural gas. As a result of pyrolysis of methane and ethane in natural gas, olefinic hydrocarbons are obtained, in particular, ethylene and propylene. The percentages of raw materials and olefin hydrocarbons produced from them are given in parentheses: ethane or a mixture of ethane and propane (83-86%), gasoline or cracked gasoline (24-32%), vacuum gasoil (18-24%).

The gas industry, which forms the basis of the fuel and energy base of the Republic of Uzbekistan, has its own prestige in the world community, and is considered the main exporter of polymer and natural gas in Central Asia. The degree of destruction of the pyrolysis product depends on the hydrocarbon content of the raw material. As a result of pyrolysis of C₂-C₄ gases and n-paraffins in the gasoline fraction, pyrogas is mainly formed. The pyrolysis process is carried out in heated reactors. The process is affected by the following technological parameters: temperature, raw material arrival time in the reactor and water vapor concentration (diluent). As the temperature increases, the reaction rate increases. The efficiency of the pyrolysis process depends on the time of arrival of the raw materials in the reaction zone. The main purpose of sending water vapor to pyrolysis reactors is to reduce the partial pressure of hydrocarbons and reduce the rate of intermediate reactions. As the concentration of water vapor increases, the formation of ethylene, butene, butadiene increases, and the output of aromatic hydrocarbons decreases.

Pyrolysis is the process of heating organic material, such as wood, in the absence of oxygen. This causes the material to decompose into a mixture of solid, liquid, and gas products, which can be used for various purposes, including energy production and the production of chemicals and fuels. Pyrolysis has importance in the fields of waste management, biomass conversion, and sustainable energy production.

Pyrolysis distillation is a thermal cracking process in which organic substances are broken down at high temperatures and in a low oxygen environment and converted into

solid, liquid and gas products. During this process, pyrolysis oil (distillate) is obtained as a result of the pyrolysis of organic substances. Pyrolysis distillate can often be used as fuel or used for different purposes in the chemical industry. It is a method generally used to recycle waste plastic and tires.

Pyrolysis distillate is one of the crude oil products obtained by pyrolysis technique. Pyrolysis is the process of breaking down organic substances in an oxygen-free environment at high temperatures. As a result of this process, various derivatives are obtained, pyrolysis distillate is one of them. Pyrolysis distillate is a raw material generally obtained by distillation at high temperatures and is among the crude oil products. The product obtained as a result of this distillation process can be refined to be used as fuel or in the petrochemical industry.

Pyrolysis distillate is an important raw material used in the industrial and energy sectors, and is also used in the production of various chemical products in petrochemical plants. It can also be used as fuel. However, recycling and storage of by-products such as pyrolysis gas, which is the raw material of pyrolysis distillate, is also important. Therefore, the production, use and recycling of pyrolysis distillate has an important place in industrial processes. The benefits of this material in the crude oil industry and petrochemical industry increase its importance.

Pyrolysis is a state obtained by the process of distillation, pyrolysis (drying by heat). How to do this process with organic active materials, such as different types of plastics, structure, technological processes and isolations of various regenerations, with structural materials built with methods of looking at spinach that has changed the milk for a while. grows. The pyrolysis distillate is called the oil. The main composition of the pyrolysis distillate is C₅-C₁₂ molecules, that is, it is the composition of the hydrocarbon series in one dimension. These hydrocarbons are characterized by high heating values and oxygen vacancy. Pyrolysis distillate is included in higher unit slaking and slaking measurements.

Pyrolysis distillate is used for various industries. This oil is used in Uzbekistan and other countries in the fields of drying, washing, construction, smelting of high-rise buildings, operation of furnaces, and technical engineering. They also produce high concentrations of gasoline and gas. It is a convenient and popular tool for application or use in various fields using the oils obtained by drying organic materials under high temperature in the drying method.

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