

Benzo(a)pyrene is a compound from the group of polycyclic aromatic hydrocarbons, a widely spread carcinogen substance. It is present in gaseous industrial wastes, in automobile exhausts, in tobacco smoke, in food combustion products. Ferrous metallurgy accounts for up to 40%, heat-power engineering –26%, the chemical industry – 16% of benzene(a)pyrene, supplied to the environment.

Benzene is an unsaturated, a colorless, six-carbon ring, basic aromatic liquid compound (C₆H₆).

Berthollet's salt is potassium chlorate KClO₃. It was first obtained by K. Berthollet in 1786 by passing chlorine through a hot concentrated solution of potassium hydroxide:



Mixtures of potassium chlorate with reducing agents (phosphorus, sulfur, organic compounds) are explosive and sensitive to friction and shock; used in pyrotechnic products.

BET is the method of determination of specific surface area of solid bodies based on the model of physical adsorption of molecules of gases (nitrogen, argon, etc.) using the accepted value of molecular cross section. The method has received the name by the names of three scientists (S. Brunauer, P. Emmett, E. Teller), who developed the corresponding model for polymolecular adsorption. Despite some shortcomings in the theoretical description, this method is widely used as a standard technique for determining the surface area of catalysts and adsorbents.

Binary compounds (borides, halides, hydrides, carbides, oxides, pnictogenides, silicides, chalcogenides) are chemicals formed, as a rule, by two chemical elements. The term “binary compounds” is usually not applied to basic and acid oxides. Non-salt forming oxides are included in binary compounds.

Bitumen is a solid, semi-solid or viscous hydrocarbon with a colloidal structure, brown to black in colour, obtained as a residue in the distillation of crude oil, by vacuum distillation of oil residues from atmospheric distillation. Bitumen is often referred to as asphalt and is primarily used for construction of roads and for roofing material. This category includes fluidised and cut back bitumen.

Bituminous is containing bitumen or constituting the source of bitumen.

Bituminous sand is a formation in which the bituminous material (see **Bitumen**) is found as a filling in veins and fissures in fractured rocks or impregnating relatively shallow sand, sandstone, and limestone strata; a sandstone reservoir that is impregnated with a heavy, viscous black petroleum-like material that cannot be retrieved through a well by conventional production techniques.

Blending is the process of mixing two or more petroleum products with different properties to produce a finished product with desired characteristics.

A block (honeycomb) catalyst is a heterogeneous catalyst in which a carrier is used in the form of a monolithic block. Usually the block has a set of the parallel not crossed channels and is manufactured of ceramic silicate or metal materials. The active component is applied to the surface of the channels. The block catalyst is used in such processes where a large pressure drop is undesirable, for example, in the neutralization of exhaust gases in automobiles.

Boiling range is the range of temperature usually determined at atmospheric pressure in standard laboratory over which the boiling (or distillation) of a hydrocarbon liquid commences, proceeds, and finishes.

Borax is a natural compound (mineral), the chemical formula of Na₂B₄O₇ · 10H₂O is sodium tetraborate. It is used for soldering metals as a flux, in the production of enamels, glazes, optical and non-colored glasses, in the paper and pharmaceutical industries, etc.

Broad (wide) fraction of light hydrocarbons (BFLH or WFLH) is a product of processing of associated petroleum or natural gas. It is a mixture of volatile hydrocarbons with a number of carbon atoms from 2 to 5 and valuable petrochemical raw materials.

Bronze is an alloy of copper with various metals (tin, aluminum, beryllium, lead, cadmium, chromium, etc.). Accordingly, bronze is called tin, aluminum, beryllium, etc.