CHEMICAL FACTOR OF PAINT AND VARNISH PRODUCTION AS RISK FACTOR OF AIR POLLUTION OF THE WORKING ZONE (REPUBLIC OF UZBEKISTAN)

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Abstract: *for rising of efficiency of ventilating system and depression of level of air pollution of a working zone chemicals it is necessary to make preventive repairs of the equipment of all ventilation system. The most radical actions for restriction of an adverse effect of a chemical factor are their decrease in a source of education (sealing) and also their excision through the organization of the mechanical local exhaust ventilation with rate of a suction in a working air ventilation of 0,6-1,5 m/sec.*
Keywords: *occupational health, paint and varnish production, working conditions, chemical factor, recreational actions.*

ХИМИЧЕСКИЙ ФАКТОР ЛАКОКРАСОЧНОГО ПРОИЗВОДСТВА КАК ФАКТОР РИСКА ЗАГРЯЗНЕНИЯ ВОЗДУХА РАБОЧЕЙ ЗОНЫ (РЕСПУБЛИКА УЗБЕКИСТАН)

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Аннотация: *для повышения эффективности вентиляционной системы и снижения уровня загрязнения воздуха рабочей зоны химическими веществами необходимо проводить профилактический ремонт оборудования всей системы вентиляции. Наиболее радикальными мероприятиями по ограничению неблагоприятного воздействия химического фактора являются уменьшение их в источнике образования (герметизация), а также удаление их при помощи организации механической местной вытяжной вентиляции со скоростью отсоса в рабочем вентиляционном отверстии 0,6-1,5 м/с.*
Ключевые слова: *гигиена труда, лакокрасочное производство, условия труда, химический фактор, оздоровительные мероприятия.*

In Uzbekistan there is a steady tendency to development of paint and varnish production, both large productions, and small enterprises. In modern conditions of scientific and technical progress the character and working conditions of workers of paint and varnish production became others, as dictated need of carrying out researches on studying of factors of production medium for its various shops [1, p. 141; 3, p. 72; 5].

Our work is devoted to a research of the leading harmful production factor – paint and varnish production, chemical in the main workplaces, taking into account the used raw materials and the received ready-made product.

For carrying out this research the laboratory method of a research which included a series of methods of determination of gas contamination of air of a working zone was used. The obtained data estimated according to State standard 12.1.005-88 "The general sanitary and hygienic demands to air of a working zone" and Health regulations and norms of the Republic of Uzbekistan № 0294-11 "Hygienic standards the extreme admissible concentration (EAC) of harmful substances in air of a working zone".

At the modern paint and varnish plant the main ready-made product is the enamel. All production phases of an enamel are carried out in one big room. At the shop on production of an enamel in air of working zones of the workers who are carrying out professional activity there are steams of aromatic hydrocarbons and hydrocarbons of oil: xylol, white spirit, nefras [2, p. 43; 4, p. 35].

The conducted researches showed that in a workplace of inspectors of raw materials and a holiday of finished goods the major influencing chemical factor is the xylol which concentration in air of a working zone makes 49

mg/l at extreme admissible concentration of 50 mg/l. Bureaucrats of preparation of raw materials are affected by 80% of operating time of a nefras whose concentration makes 88 mg/l at maximum-permissible concentration of peer 100 mg/l. It is bound to the fact that in the course of a production cycle bureaucrats of preparation of raw materials the most part of time serve shop tanks storages for liquid components of production of an enamel.

In air of a working zone of bureaucrats of dispergating concentration of a xylol makes 50 mg/l at maximum-permissible concentration of 50 mg/l. Concentration practically corresponds to the maximum allowable concentration as in the course of production of primary liquid batch there is a need of addition in a dissolver of various solid and liquid components in the course of hashing at an open cover of a dissolver that leads to hit of a xylol in air of a working zone.

At process of "statement of an enamel on type" in workplaces of colourists influence of a nefras which concentration makes 90,7 mg/l at the maximum allowable concentration of peer 100 mg/l becomes perceptible. This indicator doesn't exceed maximum allowable concentration. In workplaces of a ready enamel influence of a xylol as the major operating factor at this stage of production becomes perceptible.

Thus, according to the obtained data it is possible to draw a conclusion that the structure and concentration of chemicals in air of a working zone doesn't depend on the period of year and changes slightly. The most radical actions for restriction of an adverse effect of a chemical factor are their decrease in a source of education (sealing) and also their excision through the organization of the mechanical local exhaust ventilation with rate of a suction in a working opening of 0,6-1,5 m/sec.

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