

## THE INFLUENCE OF CFCs ON THE ENVIRONMENT

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In the modern world of innovative technologies a significant place is occupied by ecology and safe environment. Regulation and safety control are carried out on the high international level, and all the countries should follow the directions and execute them in full measure. Today there exists a huge amount of industrial and household refrigeration and heat pump equipment without which it is difficult to imagine normal existence of humanity. However, very few people know the way how coldness or warmth is formed in those plants and how safe it is to have climatic equipment in your home.

Freon is used as working substance in refrigeration and heat pump equipment. It is colourless gas or liquid, odourless, nonexplosive, incombustible, poorly soluble in water. Freon, also known as chlorofluorocarbons (CFCs), and halon are inert and non-toxic substances. They were widely used in foams, aerosols and dry-cleaning, while halon in fire extinguishers. As it turned out afterwards, CFCs can cause destruction of large amount of ozone in the stratosphere and, as a result, increase the number of cases of skin cancer among people, as well as cause the occurrence of other serious problems. It has become possible to replace them with less ozone-destructive products.

Therefore, the international community took up solving this problem that eventually resulted in signing the Montreal Protocol in 1987 in order to reduce the production and consumption of chlorofluorocarbons and halon, substances which deplete the ozone layer in the upper atmosphere. The agreement also provides for trade bans on CFCs and CFC-consuming products. Since then emissions of CFCs around the developed world have largely ceased.