Evaluation of Chlorinated Paraffin Presence in Disposable Face Masks

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The study investigated different disposable face masks using high-resolution mass spectrometry. In the production of disposable face masks, chemical contaminants such as chlorinated paraffins or chloroalkanes may have been used, therefore the study aimed to investigate the content of chlorinated paraffins in disposable face masks. The research problem of the work – what is the presence and content of chlorinated paraffins in disposable face masks. Various samples of disposable face masks were analyzed from European and Asian regions in the research. The study used gas chromatography-mass spectrophotometry. The data from the study shows that in 59% of tested samples content of chlorinated paraffins exceeds laboratory background contamination, which proves the use of chlorinated paraffins in the production process but the contamination does not exceed the limit of 1% allowed by the European Union regulation.

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