**SCREENING ABILITY OF ENVIRONMENTALLY FRIENDLY AEROSOLS FOR THERMAL RADIATION**

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**Abstract:** The factors influencing the screening of thermal radiation by environmentally friendly aerosols have been theoretically substantiated and experimentally determined. The processes of absorption and scattering of thermal radiation have been analyzed.

**Introduction**

Nowadays there is a problem of protecting buildings and structures located directly in the zone of thermal action of fire from the effects of infrared radiation. Electromagnetic waves are capable of transmitting a large amount of energy over a significant distance and raising the temperature of surfaces, which can cause them to ignite.

Currently, the most common way to protect against thermal radiation is to install water-based fire curtains. It is known that such curtains have screening and cooling efficiency, which depends on the dispersity of water droplets [1, 2]. At the same time, some authors [3] note that such curtains poorly absorb short-wave infrared radiation and are effective mainly for screening low-temperature sources of radiation.

There is also a mechanical way to limit the contact of the combustible system with surfaces by arranging obstacles made of various heat-reflecting materials (metal, asbestos, graphite, etc.), but this method is very difficult to apply in practice.

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