Polydimethylsiloxane/Glass-Based Composite Elastomer for Thermophysical Applications

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Received: December 01, 2021  Corresponding author: E.V. Antonov

Abstract. The possibility of reducing the thermal conductivity of the composite material based on polydimethylsiloxane by adding hollow glass microspheres as fillers was tested. Based on the data obtained, it can be concluded that a composite material containing microspheres at a concentration of 2.5\% has a lower thermal conductivity coefficient by 40\%, but also loses adhesion work and transparency in the optical range.

Acknowledgements. The work was supported by the Ministry of Science and Higher Education of the Russian Federation (Project 075-15-2021-1349).


View online: https://doi.org/10.17586/2687-0568-2022-4-1-28-32

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