

THERMOCHEMICAL PROPERTIES OF NITROPHENYL TETRAZOLES

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Abstract: The combustion energies of a number of nitrogen-containing aromatic compounds, derivatives of nitrophenyl tetrazoles, have been experimentally measured. Based on the characteristics obtained, the enthalpies of combustion and the formation of these compounds in the standard state were calculated. It has been established that the introduction of a highly endothermic tetrazole fragment into the aromatic structure of benzene and nitrobenzene significantly increases the energetics of the compounds compared with the introduction of an azasidonic acid fragment into these structures.

Keywords: enthalpy of combustion and formation; nitrophenyl; azasidnone group; tetrazoles

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