Spin-Peierls transition in (Et-2,6diMe-Pz)(TCNQ)₂

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The crystal structure and magnetic properties of the new organic anion-radical salt (Et-2,6diMe-Pz)(TCNQ)₂ were investigated. The temperature dependence of magnetic susceptibility was measured in the temperature range from 1.8 K to 300 K and a spin-Peierls transition was observed at a temperature 165 K. Investigation of the crystal structure above and below the transition temperature confirms a crystal structure change related to the spin-Peierls transition. The observed transition is further accompanied by the appearance of a λ -anomaly in the temperature dependence of specific heat at the transition temperature.

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