This work described the analysis expressions of Grüneisen coefficient volume relation $\gamma(v)$ from the viewpoint of the construction of the molecular crystalline material state equation. Regression analysis results was compared to the available experimental data for explosive TATB that was gained in the static shock-wave experiments. All concerned expressions for $\gamma(v)$ in normal cases $\gamma_0$ and in the range of low pressures predict Grüneisen coefficient value with fine accuracy, but in the limit of infinite compression this experiments can not give correct values. One of the causes of this effect is low pressures condition for the experiment. In the course of analysis it was proposed Grüneisen coefficient volume relation expression for construction of triamino-trinitrobenzene state equation.