The title compound was prepared by reaction of the elemental components in a high frequency furnace with subsequent annealing at 800 °C. It crystallizes with a rhombohedral cell, space group $R3m$ and the hexagonal lattice constants: $a = 8.8714(7)$ Å, $c = 12.783(2)$ Å, $V = 871.2$ Å$^3$, $Z = 3$. The structure was determined from single crystal X-ray data and refined to a residual of $R = 0.023$ for 25 variable parameters and 414 independent structure factors. The structure can be derived from that of Th$_2$Sn$_4$ (Makarov and Vinogradov, Sov. Phys. Crystallogr. (1956) 1, 499) with the composition Gd$_4$Fe$_{31}$C$_3$ most likely isotypic with Pr$_2$Mn$_{17}$C$_{3-x}$.

The new compound La$_2$Mn$_{17}$C$_{3-x}$ is isotypic with Pr$_2$Mn$_{17}$C$_{3-x}$. A compound reported by Stadelmaier and Park (Z. Metallk. (1981) 72, 417) with the composition Gd$_4$Fe$_{31}$C$_3$ most likely is isotypic with Pr$_2$Mn$_{17}$C$_{3-x}$. The structure will be discussed together with other recent examples of ternary carbides which can be derived from binary structure types by filling of interstitial voids.