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Upper critical field $\mathbf{H}_{c2}$ in $\mathbf{PrOs_4Sb_{12}}$[1] DAVID PARKER, USC Dept. of Physics, KAZUMI MAKI, USC Dept. of Physics , HYEKYUNG WON, Hallym Univ. Dept. of Physics — We study the upper critical field of the A and B phases in the triplet superconductor $PrOs_4Sb_{12}$ within the p+h-wave superconductivity proposed recently for this material. The present result is compared with H_{c2}(t) and H*(t), the boundary between the A and B phase in $PrOs_4Sb_{12}$, reported earlier and with more recent data of $H_{c2}(t)$ for the single phase crystal. We find H_{c2}(t)'s for both the two phase crystal and the single phase crystal are described by the model for the A phase. From this fitting one can deduce the Fermi velocity as $v = 2.5 \times 10^6$ cm/s. On the other hand H_{c2}(t)for the B phase is found to be somewhat smaller than H*(t), which is rather puzzling.

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