39 How can propan-2-one be converted into tert-butyl alcohol?

2-methyl propan-2-ol (tert butylalcohol)

Propan-2-one is a ketone. Its structural formula is $H_3C > C = 0$ ketones when treated with Grignard reagent give tertiary alcohols Grignard reagent give tertiary alcohols.

$$\begin{array}{c} H_3C \\ H_3C \\ \end{array} C = O + CH_3MgBr \xrightarrow{Dry} \begin{bmatrix} H_3C \\ H_3C \\ \end{array} C \xrightarrow{OMgBr} \\ \end{array}$$
(Addition product)

(Addition product) Propan-2-one