

- 7.40 (a) The temperature dependence of grain growth is incorporated into the constant  $K$  in Equation 7.9.  
(b) The explicit expression for this temperature dependence is of the form

$$K = K_0 \exp\left(-\frac{Q}{RT}\right)$$

in which  $K_0$  is a temperature-independent constant, the parameter  $Q$  is an activation energy, and  $R$  and  $T$  are the gas constant and absolute temperature, respectively.