$$^{\circ}C/_{molal} + molal = \frac{moles\ solute}{K_g\ solvent}$$

$$^{\circ}C/_{molal} \therefore \frac{^{\circ}C \cdot K_g\ solvent}{moles\ solute}$$

Table 13.4 Molal Boiling-Point-Elevation and Freezing-Point-Depression Constants

Solvent	Normal Boiling Point (°C)	K_b (°C/*m*)	Normal Freezing Point (°C)	K_f (°C/*m*)
water, H_2O	100.0	0.51	0.00	1.86
benzene, C_6H_6	80.1	2.53	5.50	5.12
ethanol, C_2H_5OH	78.4	1.22	-114.6	1.99
carbon tetrachloride, CCl_4	76.8	5.02	-22.3	29.8
chloroform, $CHCl_3$	61.2	3.63	-63.5	4.68