解： Δr*G*⊖m=Δr*H*⊖m−*T*Δr*S*⊖m

Δr*G*⊖m,298.15K= −210.9 kJ⋅mol−1−298.15K×131.8×10−3 kJ⋅mol−1⋅K−1

= −250.2 kJ⋅mol−1

lg*K*⊖ = −Δr*G*⊖m/(2.303*RT*)= 250.2 ×103/(2.303×8.314×298.15)= 43.83

*K*⊖298.15K =6.7×1043

Δr*G*⊖m,373.15K= −210.9 kJ⋅mol−1−373.15K×131.8×10−3 kJ⋅mol−1⋅K−1

= −260.1 kJ⋅mol−1

lg*K*⊖ = −Δr*G*⊖m/(2.303*RT*)= 260.1 ×103/(2.303×8.314×373.15)= 36.40

*K*⊖373.15K =2.5×1036

该反应为放热反应，对放热反应，温度升高，*K*⊖下降。