解： CH3CH2OH(l) + 1/2O2(g) → CH3CHO(l) + H2O(l)

Δr*H*θm(1)= [−285.83−166.4 +277.69] kJ⋅mol−1= −174.5kJ⋅mol−1

CH3CHO(l) + 1/2O2(g) → CH3COOH(l)

Δr*H*θm(2)= [−484.5+166.4] kJ⋅mol−1= −318.1 kJ⋅mol−1

CH3COOH(l) + O2(g) → 2CO2 + 2H2O(l)

Δr*H*θm(3)= [2×(−285.83)+2×(−393.5)+484.5] kJ⋅mol−1= −874.2kJ⋅mol−1

Δr*H*θm(总)= Δr*H*θm(1)+ Δr*H*θm(2)+ Δr*H*θm(3)

= [−174.5 −318.1−874.2] kJ⋅mol−1= −1366.8kJ⋅mol−1