**中五化學 熱力學**

補底

**利用標準燃燒焓變計算標準反應焓變**

已知：

1. $∆H\_{c}^{∅}$[C2H2(g)] = -1299 kJ mol-1
2. $∆H\_{c}^{∅}$[H2(g)] = -285.8 kJ mol-1
3. $∆H\_{c}^{∅}$[C2H6(g)] = -1560 kJ mol-1

計算以下反應的標準反應焓變：

C2H2(g) + 2H2(g) C2H6(g)

$$∆H\_{}^{∅}$$

**路經1**

C2H2(g) + 2H2(g) C2H6(g)

**路經2**

$∆H\_{c}^{∅}$[C2H6(g)]

$$×\\_\\_\\_\\_\\_\\_\\_$$

+ \_\_\_\_\_O2(g)

+

$∆H\_{c}^{∅}$[H2(g)]

$$×\\_\\_\\_\\_\\_\\_\\_$$

+ \_\_\_\_\_O2(g)

$∆H\_{c}^{∅}$[C2H2(g)]

$$×\\_\\_\\_\\_\\_\\_\\_$$

+ \_\_\_\_\_O2(g)

\_\_\_\_CO2(g) + \_\_\_\_H2O(l)

$∆H\_{}^{∅}$= ($∆H\_{c}^{∅}$[C2H2(g)] x\_\_\_\_\_\_\_\_\_) + ($∆H\_{c}^{∅}$[H2 (g)] x\_\_\_\_\_\_\_) + (-$∆H\_{c}^{∅}$[C2H6] x\_\_\_\_\_\_\_)

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