4/6/2016 C19PE

Name:

Score: 0 / 17 points (0%) [1 open-ended question not graded]

C19PE

Multiple Choice

Identify the choice that best completes the statement or answers the question.

Use the table below to answer the questions that follow.





1. The combustion of acetylene in the presence of excess oxygen yields carbon dioxide and water:

$$2C_2H_2(g) + 5O_2(g) \rightarrow 4CO_2(g) + 2H_2O(l)$$

The value of ΔS° for this reaction is ______ J/K• mol.

- a. +689.3
- b. +122.3
- c. +432.4
- d. -122.3
- e. -432.4

ANSWER: E

POINTS: 0/1

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2. The value of ΔH° for the oxidation of solid elemental sulfur to gaseous sulfur trioxide,

2S (s, rhombic) +
$$3O_2(g) \rightarrow 2SO_3(g)$$

is _____ a. +790.4 kJ/mol.

b. -790.4

c. +395.2

d. -395.2

e. +105.1

ANSWER: B

POINTS: 0/1

3. The value of ΔG° at 25°C for the oxidation of solid elemental sulfur to gaseous sulfur trioxide,

2S (s ,rhombic) +
$$3O_2(g) \rightarrow 2SO_3(g)$$

is _____ kJ/mol. a. +740.8

b. -370.4