

36 Methane forms chloromethane in a photochemical reaction using ultraviolet light.

Which statement about this reaction is correct?

- A** Methane is mixed with hydrogen chloride gas, and ultraviolet light prevents a combustion reaction.
- B** Methane is mixed with hydrogen chloride gas, and ultraviolet light provides the activation energy for the reaction.
- C** Methane is mixed with chlorine gas, and ultraviolet light prevents a combustion reaction.
- D** Methane is mixed with chlorine gas, and ultraviolet light provides the activation energy for the reaction.