

Exercise 26

Classify the six underlined properties in the following paragraph as chemical or physical:

Fluorine is a pale yellow gas that reacts with most substances. The free element melts at $-220\text{ }^{\circ}\text{C}$ and boils at $-188\text{ }^{\circ}\text{C}$. Finely divided metals burn in fluorine with a bright flame. Nineteen grams of fluorine will react with 1.0 gram of hydrogen.

Solution

gas - physical

reacts with most substances - chemical

melts at $-220\text{ }^{\circ}\text{C}$ - physical

boils at $-188\text{ }^{\circ}\text{C}$ - physical

metals burn in fluorine - chemical

Nineteen grams of fluorine will react with 1.0 gram of hydrogen - chemical