Answer on Question #55558 – Chemistry – General Chemistry
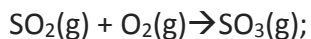
Question:

Predict the products and write a balanced equation for each of the following.
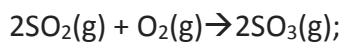Combination: SO2(g)+O2(g)→---
Express your answer as a chemical equation. Identify all of the phases in your answer.

Solution:

$SO_2(g) + O_2(g) \rightarrow SO_3(g)$;

The balanced equation:

$2SO_2(g) + O_2(g) \rightarrow 2SO_3(g)$;

The boiling point of SO_3 = 45°C, but according to the equation SO_3 will be produced in the gaseous form.

Answer: $2SO_2(g) + O_2(g) \rightarrow 2SO_3(g)$