

## Answer on Question #52440 - Chemistry – Inorganic Chemistry

### Question

Ethanol burns according to the following equation. If 15.0 mol of C<sub>2</sub>H<sub>5</sub>OH burns this way, how many moles of oxygen are needed?

### Answer:

According to the reaction equation:

1 mol of C<sub>2</sub>H<sub>5</sub>OH needs 3 mol of O<sub>2</sub>

15.0 mol of C<sub>2</sub>H<sub>5</sub>OH – x mol of O<sub>2</sub>

$$x = \frac{15.0 \cdot 3}{1} = 45.0 \text{ mol}$$

**Answer:** 45.0 mol of oxygen