

## Fuel compartment of a bottle rocket

A high school student wants to design a bottle rocket that produces 50 L of  $CO_3$ . Given that the densities of NaHCO<sub>3</sub> and CH<sub>3</sub>CH<sub>2</sub>OOH are 2.2 and 1.05 gm/cm<sup>3</sup>, what volume is needed for the fuel compartment?