Student worksheet: Producing a Foam

Introduction
This experiment examines how a stable foam is produced and what reactions are involved.

What to record
What happened (observations).

What to do
1. Put 1 g of laundry detergent and 7 g of aluminium sulfate (Causes eye damage) in a mortar and grind into a fine powder with a pestle.
2. Dissolve this powder in approximately 50 cm³ of water in a conical flask (A).
3. Dissolve 5 g of sodium hydrogen carbonate in 50 cm³ water in another conical flask (B).
4. Pour the contents of flask A into flask B and mix quickly.

Safety
Wear goggles.
Detergent may irritate the skin.

Questions
1. What reactions lead to the production of the foam?
2. How is this reaction similar to that involving the production of carbon dioxide (CO₂) during the baking process?
3. Name some other examples of foams.