

Foams






WHAT IS THE AIM OF THIS PRACTICAL?

You will learn how to produce a foam and the chemical reactions involved.

WHAT DO YOU NEED?

Materials:

Pestle and mortar	Conical flask(2)	Laundry detergent
		

Chemicals: sodium hydrogen carbonate, hydrate aluminium sulfate and water.

A BIT OF THEORY

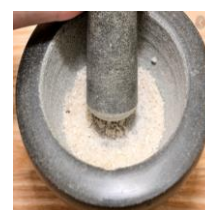
The foam is produced by the action of carbon dioxide gas on a detergent solution.

This chemical foam contains carbon dioxide (CO_2), while mechanical foams often contain air.

This foam is a colloidal system with a gas dispersed in a liquid. This is a suspension of gas in the liquid.

WHAT DO YOU HAVE TO DO?

1. Put 1 g of laundry detergent and 7 g of aluminium sulfate 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.

QUESTIONS

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

FEED-BACK

Evaluate the difficulty of this practical. Circle the number that suits the level of difficulty you found while going through this practical:

Very Easy 1 2 3 4 5 *Very Difficult*

Did you enjoy going through this practical? Circle the number that suits your choice



Not at all

1

2

3

4

5

Very much

