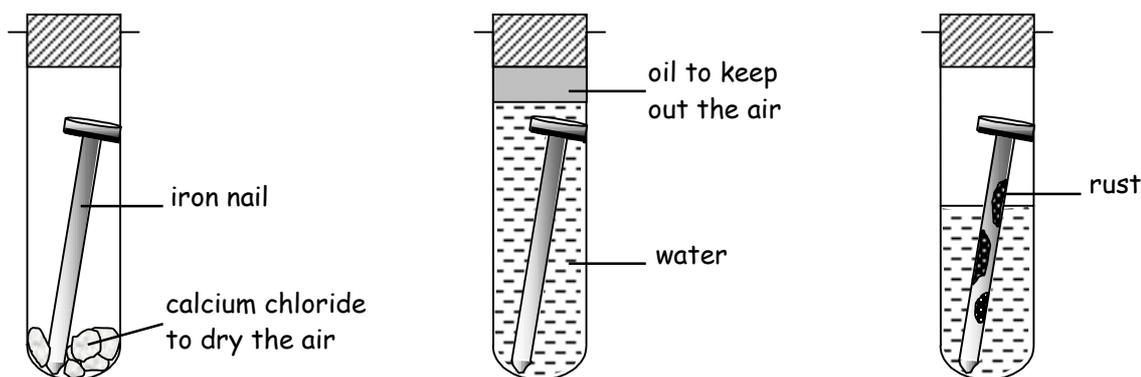


W.S.55. Harmful chemical reactions. Name

Some chemical reactions are harmful because they destroy our products.

Corrosion of metals.

Metals may be attacked by air, water or other substances around them. Usually the more reactive the metal is, the faster it corrodes. The corrosion of iron and steel is called RUSTING. The experiment below shows that both air and water are needed for rusting to happen.



In dry air the iron nail does not rust.

In water without air the iron nail does not rust.

In air and water the iron nail rusts.

To stop rusting metals can be coated with a substance that keeps out air and water. Paint, grease, plastic, or a thin layer of tin or zinc can be used.

Oxidation of foods.

Some foods react with oxygen gas in the air. This makes them taste unpleasant. Fat can be oxidised quickly, therefore fatty foods such as butter should be kept in a fridge to slow down the rate of oxidation. Another way of stopping oxidation is to keep air away from the food by using sealed packets or tins.

Exercise - Fill in the missing words in the passage below.

The corrosion of iron and steel is called Iron will only rust if it is exposed to both air and We can stop rusting by the metal with a substance that keeps out and water. This is why motor cars are given several layers of Some foods are when exposed to air. This gives them an unpleasant Keeping foods will slow down the rate of oxidation. Another way of stopping is to make sure that the food does not come into contact with air.

air rusting taste cool water oxidation coating oxidised paint