

# CHEMISTRY PROJECTS FOR CLASS 12

(DETERMINATION OF THE CONTENTS OF Soft Drink)-5<sup>TH</sup> PART

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## TEST FOR CARBON DIOXIDE

### Experiment:

As soon as the bottles were opened one by one the samples were passed through LIME WATER the lime water turns MILKY.

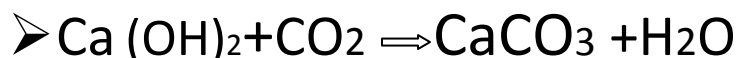
### Observation:

SL. No.	Name of drink	Time taken (in sec)	Conclusion
1	Coca Cola	26.3	CO <sub>2</sub> present
2	Sprite	21	CO <sub>2</sub> present
3	Limca	25	CO <sub>2</sub> present
4	Fanta	36	CO <sub>2</sub> present

### Inference

All soft drinks contain dissolved CO<sub>2</sub>

### Chemical Reaction involved:



# TEST FOR GLUCOSE

## Experiment:

Glucose is reducing sugar acid its presence is detected by the following test.

## Benedict's reagent test:

Small sample of cold drink of different brands were taken in a test tube and a few drops of Benedict's reagent were added to it test tube was heated for a few seconds Reddish coloration confirmed the presence of glucose in the samples.

## Observation:

SL No.	Name of drink	Observation	Conclusion
1	Coca Cola	Reddish color ppt	Glucose is present
2	Sprite	Reddish color Ppt	Glucose is present
3	Limca	Reddish color ppt	Glucose is present
4	Fanta	Reddish color ppt	Glucose is present

Inference All the samples gave positive test for glucose with Benedict's reagent hence all of them contain glucose

# TEST FOR ALCOHOL

## Experiment:

Small samples of cold drinks of different brands were taken in separate test tube and iodine followed by Potassium iodide and Sodium Hydroxide (NaOH) solution was heated in hot water for 30 minutes. Presence of yellow colored ppt. confirmed the presence of alcohol.

## Observation:



SL No .	Name of drink	Observation	Conclusion
1	Coca Cola	Yellow ppt	Alcohol present
2	Sprite	Yellow ppt	Alcohol present
3	Limca	Yellow ppt	Alcohol present
4	Fanta	Yellow ppt	Alcohol present

## Inference:

All samples contain as they give positive test for it

# TEST FOR PHOSPHATE

## Experiment:

Small samples of the drinks of different brands were taken in separate test tubes and ammonium Molybdate followed by nitric acid HNO<sub>3</sub> was added to it. Presence of canary yellow ppt confirmed the presence of phosphate ions in cold drinks.

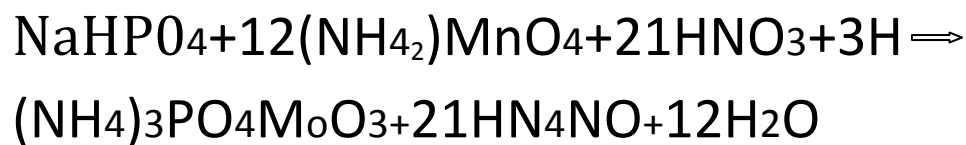
## Observation:

SL No	Name of drink	Observation	Conclusion
1	Coca Cola	Canary yellow ppt	Phosphate present
2	Sprite	Canary yellow ppt	Phosphate present
3	Limca	Canary yellow ppt	Phosphate present
4	Fanta	Canary yellow ppt	Phosphate present

## Inference:

All samples contain phosphate as they give positive test for it.

## Chemical Reactions involved:



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