



## Topfer Reagent

R021

It is used for detection of HCl in gastric fluid.

### Composition\*\*

#### Ingredients

Dimethylaminobenzene	0.5gm
95%Ethanol	100ml

\*\*Formula adjusted, standardized to suit performance parameters

### Directions

Filter the contents of sample through two thicknesses of gauze, if necessary. Take 10 ml of it and put it in a porcelain evaporating dish and add 1 or 2 drops Topfer Reagent and 1 or 2 drops of phenolphthalein solution (1% alcoholic solution). Titrate with 0.1 N NaOH until the red colour disappears. This reading should be taken for free hydrochloric acid. Continue titration until the red colour of phenolphthalein appears, further addition of alkali does not darken the red colour. Take the burette reading for the total acidity, counting from the original reading.

### Principle And Interpretation

Gastric secretion contains hydrochloric acid, secreted by the parietal cells of the fundus and upper body of the stomach and an alkaline enzyme-mucoprotein complex secreted by the superficial mucosal cells. There are two laboratory methods for gastric analysis. The tubeless technique investigates the ability of the stomach to produce acid. The incubation technique allows measurement of gastric secretion under basal and maximal output conditions and gives the quantitative values of gastric secretion. Topfer reagent is used for titration of acid with 0.1 N sodium hydroxide and phenolphthalein.

### Quality Control

#### Appearance

Orange coloured solution.

#### Clarity

Clear without any precipitate.

#### Test

Gastric analysis is carried out using Topfer reagent as an indicator for the titration of gastric acid with 0.1 N sodium hydroxide and phenolphthalein.

#### Results

Can be calculated as :% Free HCl acidity = No. of mm from beginning x 10 to the first reading

% Total acidity = No. of mm from beginning x 10 to the last reading

### Storage and Shelf Life

Store between 10-30°C. Use before expiry date on label

Revision : 1 / 2015

#### Disclaimer :



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