

Carolina™ Solution Sheets
Gastric Juice

Learn how to make and store artificial gastric juice.

Materials

Distilled Water (item #857201)
Hydrochloric Acid (item #867790)
Thymol (item #896190)
Pepsin (item #879379)

Don't want to make it yourself?
Find artificial gastric juice at Carolina.com

Item Number
864603

Procedure

1. Combine 2.9 mL hydrochloric acid, 0.008 g thymol, and 2.5 g pepsin with 500 mL distilled water.
2. Make as needed and keep refrigerated.

Notes

- Gastric juice has a shelf life of 3 months; keep solution refrigerated.

Label Information

Gastric Juice

Date Prepared: _____
Initials of Preparer: _____
Health Risk: 0
Flammability: 0
Reactivity: 0

Applications

Gastric acid is a digestive fluid, naturally produced in the lining of the stomach. It has a pH of 1 to 2 and is composed of hydrochloric acid (HCl), potassium chloride (KCl), and sodium chloride (NaCl). The acid plays a key role in digestion of proteins and making ingested proteins unravel so they can be subsequently broken down by digestive enzymes.

Reference

Stewart, Peter A. 1981. *How to understand acid-base: A quantitative acid-base primer for biology and medicine*. New York: Elsevier North Holland, 1981, © www.acidbase.org (accessed on <http://www.acidbase.org/index.php?show=sb&action=explode&id=31&sid=42>, June 5, 2014).