

# Kovac's Reagent

Learn how to make Kovac's reagent and use it to test for indoles.

## Materials

n-Amyl Alcohol (item #844530)  
Hydrochloric Acid, 37% (item #883789)  
Distilled Water (item #858621)  
p-Dimethylamine Benzaldehyde (item #861283)  
Stir Bar  
Magnetic Stir Plate (item #701023)  
Erlenmeyer Flask, 1,000-mL (item #731031)  
Graduated Cylinder (item #721744)  
Label

**Don't want to make it yourself?**  
Find Kovac's reagent at Carolina.com

**Item Numbers**  
871389, 871391, 871393

## Procedure

1. Dissolve 5 g of p-dimethylamine benzaldehyde in 75 mL of n-amyl alcohol and warm gently using a water bath.
2. When dissolved, add 25 mL of HCl and refrigerate.

## Notes

- n-Amyl alcohol is highly flammable and hydrochloric acid is extremely corrosive. Be cautious when handling.

## Label Information

### Kovac's Reagent

**Caution:** Extremely flammable and highly corrosive

Date Prepared: \_\_\_\_\_

Initials of Preparer: \_\_\_\_\_

Health Risk: 3

Flammability: 3

Reactivity: 2

## Applications

An indole is the result of the degradation of the protein tryptophan by bacteria. Kovac's reagent is used to detect the presence of the indole group in bacteria.

## Reference

Brandwein, P. F., and E. Morholt. 1986. *A sourcebook for the biological sciences*, 3rd ed. Orlando, FL: Harcourt Brace Jovanovich, 1986, p. 706.