

# Chem 210 Chapter 6

## Steam Distillation Isolation of Eugenol from Cloves

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### Day 1

Chemical Name	Per Student	Per Class (24)	Location
1.5 M Sodium Hydroxide	---	720 mL	ABB (acetic acid, acids, bases)
Dichloromethane / Methylene Chloride	---	1.8 L	HS 235D (F-3)
Calcium Chloride pellets, anhydrous	---	72 g	Inorganic Solids
Hexane	---	48 mL	HS 235C (F-2)
Hydrochloric Acid, concentrated	---	96 mL	Acid Cabinet 1 (by fridge)

Item/ Chemical Name	Per Student	Per Class (24)	Location
Whole cloves	20 g	600 g	Student supplied
Boiling chips	----	1 bottle	Ochem shelf #1
Litmus paper, red/blue	---	1 bottle	Stockroom drawer (facing fridge)
50 mL graduated cylinders	1	20	In class, stockroom drawer

### Day 2

- Computers for IR “Socrates”

### Solution Preparation

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1.5 M Sodium Hydroxide

*Pellets are located on the inorganic solids shelf for NaOH.*

**Important:** Add NaOH slowly to about 500mL water. Add the remaining water.

F.W. 40.00g

1 liter

$$40.00g \text{ NaOH} \times 1.5M \times 1 L = 60 g \text{ NaOH} + 940 \text{ mL } H_2O$$