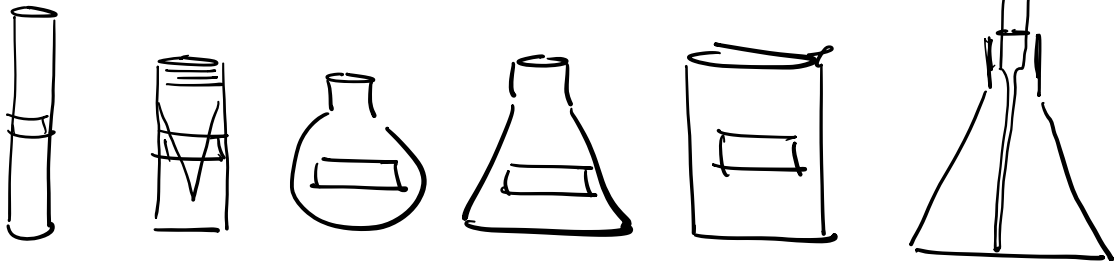


Labeling of Samples & Waste

Containers used by lots of people or placed in storage fall under HazCom (Hazard Communications), this was covered last Wednesday.

Chemical Name	}	Laborator Coordinator (Staff)
Pictogram(s)		
Signal Word		
Hazard Statement(s)		
Contact Info		

Personal Samples must all be labeled but not to HazCom standards.



Labels can be made from many materials

- Avery labels
- Masking Tap

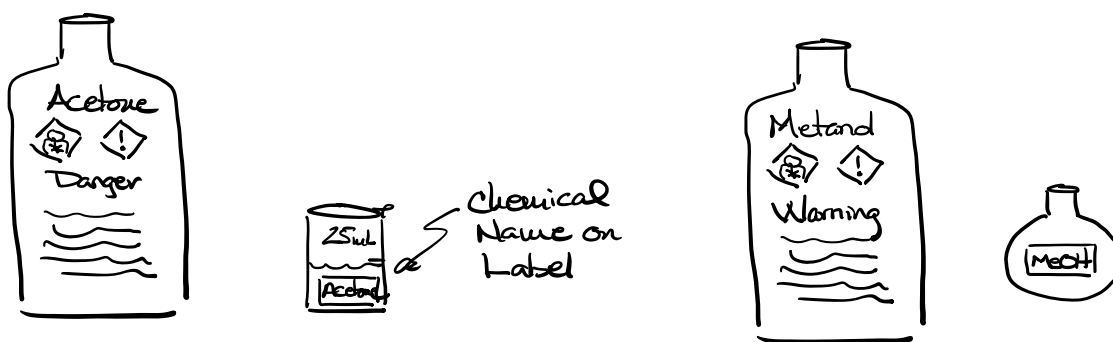
* Organic Solvents dissolve ink

- labels written in ink become unreadable in an accident.

- labels should be in pencil

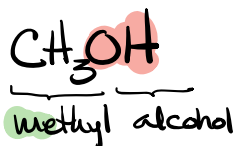
Carbon graphite does not dissolve with organic solvents.

Still readable in an accident

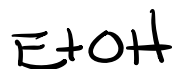
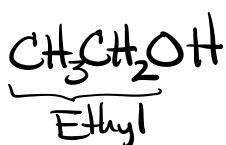


Use of standard abbreviations ok

Methanol

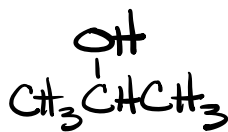


Ethanol



2-propanol

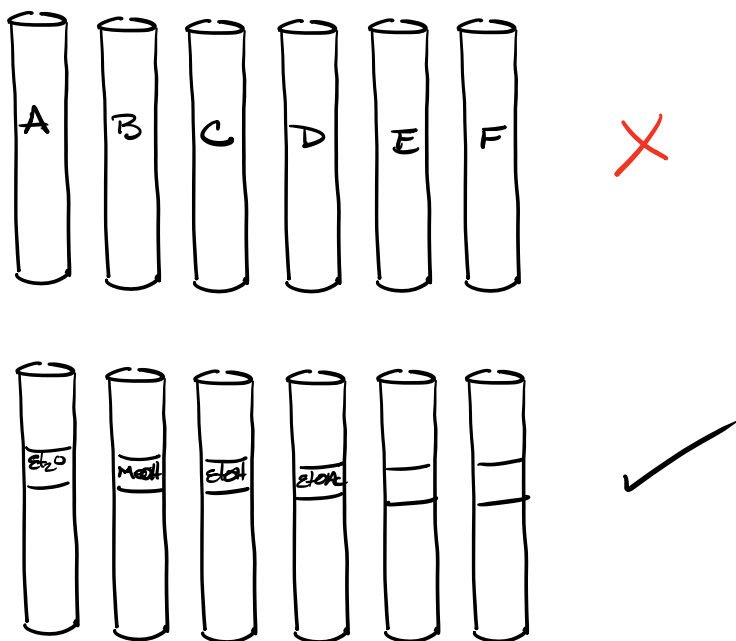
iso-propanol

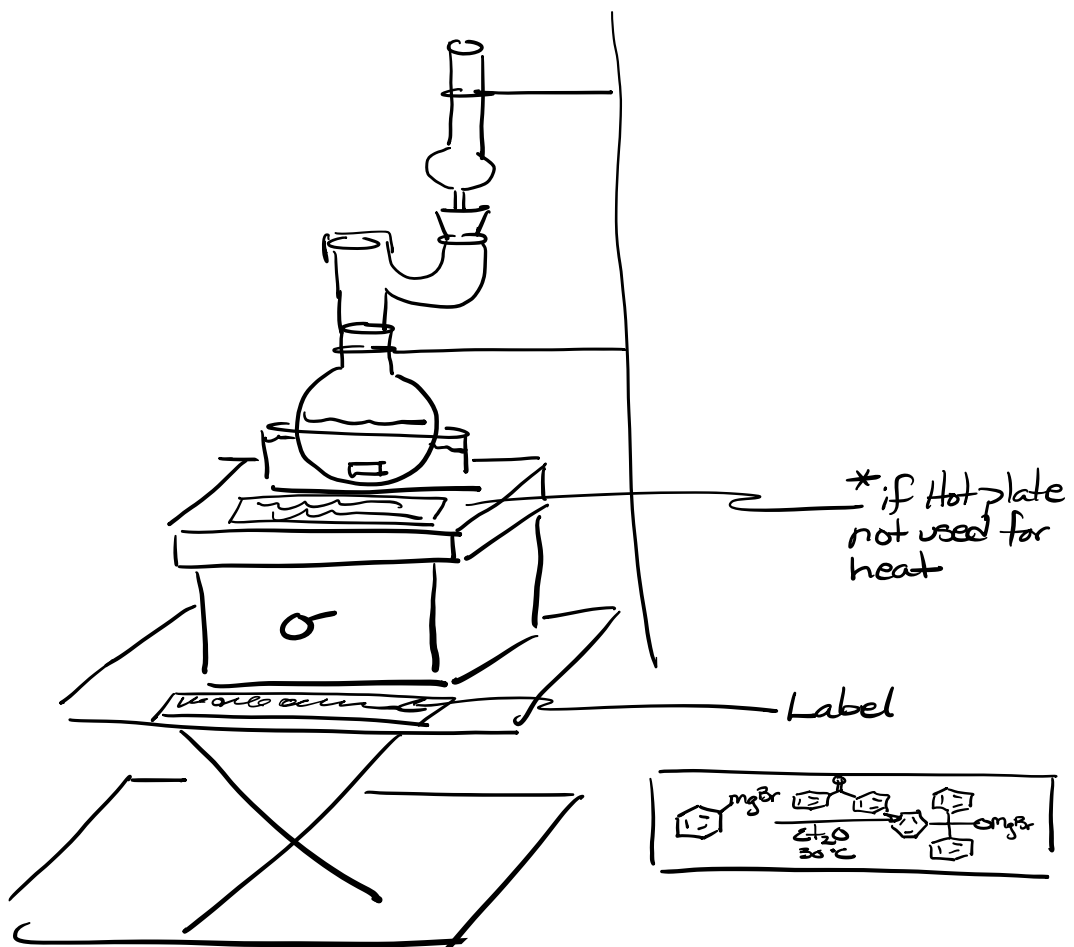



Acetone $\text{CH}_3\text{-}\overset{\text{O}}{\parallel}\text{C}\text{-CH}_3$ no abbreviation

Diethyl ether $\text{CH}_3\text{CH}_2\text{-O-CH}_2\text{CH}_3$ Et_2O
Ethyl

Ethyl acetate $\text{CH}_3\text{CH}_2\text{O-}\overset{\text{O}}{\parallel}\text{C}\text{-CH}_3$ EtOAc
Ethyl acet

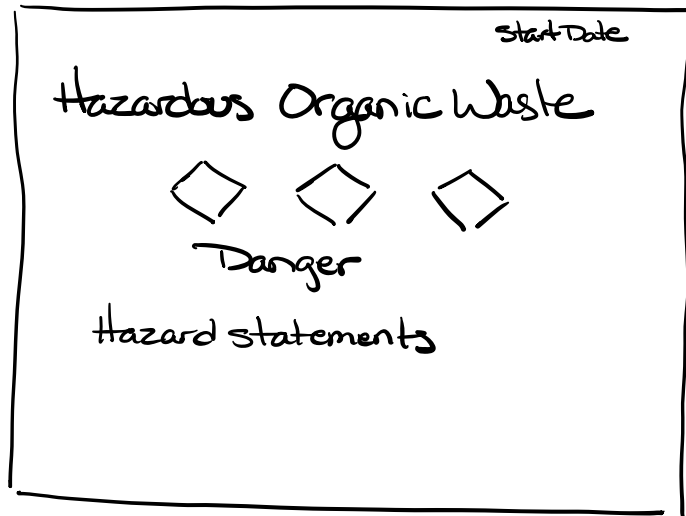
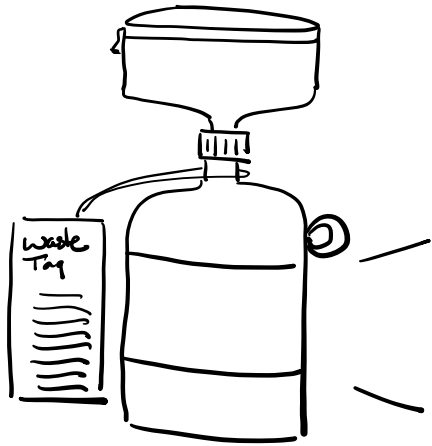





 Pipets can be reused
 for multiple classes
 for some solvents.
 Clean Solvents

Waste Labels - HazCom

Must be labeled in pencil



This side filled out by
Stockroom Staff

Hazardous Waste

State and Federal Law Prohibits Improper Disposal
If found contact the Cabrillo College
Hazardous Materials Office
(831) 479-6316

Originator Chemistry / NAS
Phone Stockroom #
Room 6013
Date Completed date

Hazmat Office Use Only

Tracking Number _____

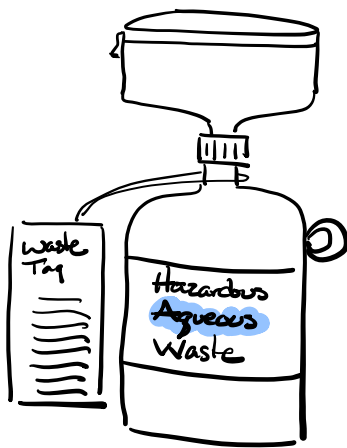
Date picked up _____

Primary Hazard Secondary Hazard Secondary Hazard

	Pictograms	
←		→

In case of emergency call
911 and (831) 479-6313

Cabrillo College
Hazardous Materials Office
6500 Soquel Drive
Aptos, CA 95003



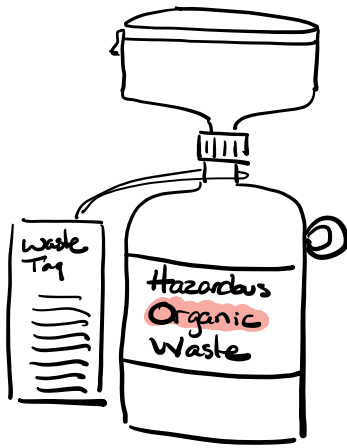
Waste that dissolves in water or is miscible with water

Homogenous mixture with water

- NaOH(aq) ✓
- NaCl(aq) ✓
- Meat(aq) ✓
- EtOH(aq) ✓
- Acetone(aq) ✓

Salts, alcohols, acetone

Diethyl ether, hexane, toluene ✗



Waste that dissolves in organic solvents.

Homogeneous with organic solvents

- Biphenyl ✓
- Triphenyl methand ✓
- Acetone (no H₂O) ✓
- Meat (no H₂O) ✓
- EtOH (no H₂O) ✓
- Hexane ✓
- Toluene ✓

No H₂O, No Salts ✗



Solid samples that have no solvent (Dry Solids)

Expensive waste for chemicals

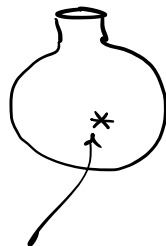
- All dry chemicals
- Heavily soiled gloves
- Weighing paper w/ sticky residue

Papertowels used for H₂O

Gloves not chemically contaminated ✗



Clean Broken Glass

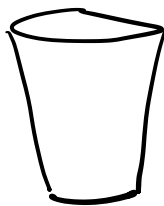


Star Crack



Glass Pasteur Pipets

* Rinse with acetone in organic waste first, then dispose in broken glassware box.



Trash Can ?

Almost nothing

- Non-soiled paper
paper towels used to dry H_2O
- Gloves as long as not soiled from a spill
- Used tap labels

paper towels used
for drying



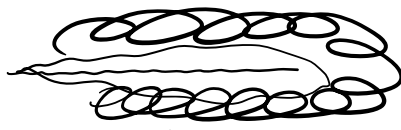
Trash

* Paper towels used
for spill

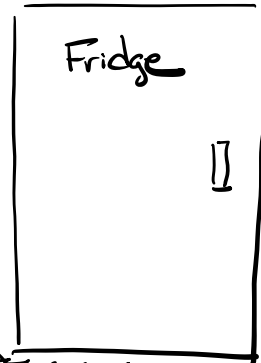


Solid waste

Papertowels can be a serious hazard



Attempted to contain
waste with paper towels



- papertowels add more surface area for evaporation.
- Added fuel

Correct procedure for small spill ≤ 10 mL

- Okay to use paper towels
- Paper towels should be placed in back of fume hood to allow for evaporation of solvent
- Moved to solid waste after evaporation

Procedure for large spill $\leq 100 - 200$ mL

- Use Vermiculite (diatomaceous Earth) adsorbent, but not flammable.
- Sweep up the solid & dispose of in solid waste container.

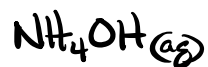
Larger spill we evacuate the room and allow instructor & staff to deal with.

Difference between liquid & aqueous

Liquid is a state of matter



Aqueous is a Solution
in H_2O



Solutions with
water as solvent.