

8.2 Plant Pigments	Quantity	Location	Thin-Layer Chroma.	Location
Tomato Paste	1 can	Household Products shelf	Cyclohexane	HS 235C (F-2)
Acetone	240 mL	HS 235C (F-2)	Toluene	HS 235D (F-3)
Dichloromethane / Methylene Chloride	240 mL	HS 235D (F-3)	Hexane	HS 235C (F-2)
Sodium Chloride, Saturated	1000 mL	Inorganic Liquids	Ethanol	HS 235C (F-2)
Calcium Chloride pellets, anhydrous	50 g	Inorganic Solids	Wide mouth jars	Same type of jar that holds zinc pieces
70:30 hexane / acetone	100 mL	HS 235C (F-2)	Rulers	Stockroom drawer by 237
Toluene	100 mL	HS 235D (F-3)	Forceps	Stockroom drawer by 237
Can opener	1	Household products shelf	TLC Plates 1"x3"	Ochem shelf #1
Pasteur Pipettes	box	Shelf facing 227	1 bunsen burner	In class, stockroom
Mortar and pestle	1	Household products shelf	Bunsen striker	In class, stockroom

8.4 Colorless Compounds	Quantity	Location
-Alumina, aluminum oxide		Inorganic Solids
-Open-end melting point capillaries		In class or Ochem shelf #1
-Ultraviolet light lamp	1 or 2	Instrument Room
-TLC plates coated w/ fluorescent indicator (Eastman silica gel sheets with fluorescent indicator 13181)		Ochem Shelf #1
-Or chromatograms in 4oz. bottle containing iodine crystal iodine, 4oz		
-wide mouth jars		
-9:1 toluene / methanol (methyl alcohol)	100 mL	HS 235D (F-3)
-Cyclohexane	100 mL	HS 235C (F-2)
-Dichloromethane / methylene chloride	100 mL	HS 235D (F-3)
-Toluene	100 mL	HS 235D (F-3)
-1% solutions in Toluene (three separate bottles) anthracene, chloesterol, triphenylmethanol		HS 235D (F-3), Organic Solids shelf
- Ethyl Acetate	1 bottle	HS 235C (F-2)
-Silica gel	1 tube	Ochem Shelf #1

Fall 2011 Unknowns	Quantity	Numbers	Location
Benzoic Acid	5 mg		Organic Solids
1,4-Dimethoxybenzene	5 mg		Organic Solids
Trans-cinnamic acid	5 mg	2, 4, 9, 12, 18	Organic Solids
Biphenyl	5 mg	3, 6, 13, 15, 19	Organic Solids
Phenyl salicylate	5 mg	4, 7, 10, 16, 20	Organic Solids
Salicylic acid	5 mg	1, 5, 8, 11, 17	Organic Solids

## Solution Preparation

**9:1 toluene / methanol** (use molar masses and densities)

$$9(92.14g \text{ toluene}): 1(32.04g \text{ methanol}) = 829.26g : 32.04g = \frac{829.26g}{0.8669 g/mL} : \frac{32.04g}{0.792 g/mL} = \mathbf{957mL : 40.5 mL}$$

**1% solutions in toluene**

1 g in 100 mL toluene for each of the three substances