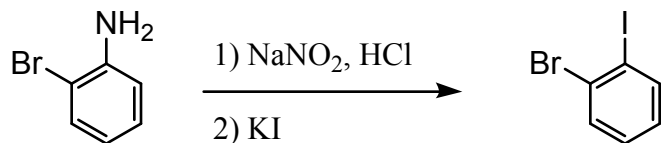


# California State Polytechnic University, Pomona

Dr. Laurie S. Starkey, CHM 3140L/3150L/4220L/4240L

## Completing the Reagent Table for Organic Chemistry Prelab

A Reagent Table is an important part of a lab notebook. It contains the amounts of each "ingredient" used in an experiment (starting material, reagents, catalysts, solvents, etc.), as well as relevant physical properties for each species. The Amounts of each will be given in the experimental procedure, but you must use reference materials such as the CRC Handbook or Wikipedia to find the physical properties of each reagent used in the experiment (try Google!). To complete the Table, you must calculate the moles, determine the limiting reagent and calculate the theoretical yield (TY) of product - the maximum amount that can be formed. The molar equivalents column provides a simple ratio of the various reagents (limiting reactant is set to 1.0 equiv.) *This part of the prelab is to be completed prior to the BEGINNING of each lab.* The sample table below is provided for practice. You need to know that each component reacts stoichiometrically (1:1) in the given reaction.



Reagent	MW	Density	Amount	Mole	Equiv.	Remarks
2-bromoaniline	172	1.56	2.0 mL			bp 229 °C
NaNO <sub>2</sub>	69	--	1.9 g			--
HCl (conc.)	--	--	5.0 mL			Corrosive!
KI	166	--	3.6 g			--
H <sub>2</sub> O	--	--	10 mL	--	--	--
2-iodobromo-benzene	283	2.2				bp 240 °C, mp 9 °C

Show your work here:

YouTube  
video  
solution



<http://bit.ly/1r7Oq3j>