

CHM 2211L - PREPARATION OF SULFANILAMIDE FROM ACETANILIDE - DATA TABLE

PHYSICAL PROPERTIES OF REAGENTS AND PRODUCTS

NAME	STRUCTURE and FORMULA	MOLAR MASS (g/mol)	DENSITY (g/mL)	MELTING POINT (° C)	BOILING POINT (° C)
(1) Acetanilide			-----		-----
(2) Chlorodulfonic acid				-----	
(3) p-Acetamido-benzenesulfonyl chloride			-----		-----
(4) conc. Ammonia (15 M NH ₃)			Solution:		-----
(5) p-Acetamido-benzenesulfonamide			-----		-----
(6) conc. (12 M) Hydrochloric acid			Solution:	-----	-----
(7) Sodium Bicarbonate			-----	-----	-----
(8) Sulfanilamide			-----		-----

QUANTITIES OF REAGENTS USED - QUANTITIES OF PRODUCTS (THEORETICAL AND ACTUAL)

STRUCTURE	VOLUME (mL)	WEIGHT (g)	MOLES (mol)	Mark Limiting Reactant
(1)	-----			
(2)				
(4)	Solution:	Solution: Solute:	Solute:	
(6)	Solution:	Solution: Solute:	Solute:	
(7)	-----			
(8)	-----	Actual:	Actual	
	-----	Theory:	Theory:	

PERCENT YIELD SULFANILAMIDE: _____

(Show all calculations on Back or on Separate sheet)