

CHM 2210L - DATA TABLE

PREPARATION OF METHYL m-NITROBENZOATE

PHYSICAL PROPERTIES OF REAGENTS AND PRODUCTS

NAME	STRUCTURE AND FORMULA	MOLAR MASS (g/mol)	DENSITY (g/mL)	MELTING POINT (°C)	BOILING POINT (°C)
(1) Methyl benzoate					
(2) conc. Nitric acid (15.7 M)			d: _____ conc %:	XXXXXX	XXXXXX
(3) conc. Sulfuric acid (18.1 M) <i>(solvent &amp; catalyst)</i>		XXXXXX	XXXXXX	XXXXXX	XXXXXX
(4) Methyl m-nitrobenzoate			XXXXXX		XXXXXX
(5) Water					

QUANTITIES OF REAGENTS USED AND PRODUCTS FORMED (THEORETICAL, ACTUAL)

STRUCTURAL FORMULA	VOLUME (mL)	WEIGHT (g)	MOLES (mol)	Check Limiting Reactant
(1)				
(2)		Wt solution: ----- Wt. HNO <sub>3</sub> :	<b>Solute:</b>	
(4)	XXXXXX		XXXXXX	ACTUAL
	XXXXXX			THEORY
(5)	XXXXXX			THEORY

PERCENT YIELD: \_\_\_\_\_

(SHOW ALL CALCULATIONS ON BACK)  
OR ON A SEPARATE SHEET)