

CHM 2211L - DATA TABLE

REDUCTION OF tert-BUTYLCYCLOHEXANONE WITH SODIUM BOROHYDRIDE

PHYSICAL PROPERTIES OF REAGENTS AND PRODUCTS

NAME	STRUCTURE and FORMULA	MOLAR MASS (g/mol)	DENSITY (g/mL)	MELTING POINT (°C)	BOILING POINT (°C)
(1) 4-tert-BUTYL-CYCLOHEXANONE			xxxxx		
(2) SODIUM BOROHYDRIDE			xxxxx	xxxxx	xxxxx
(3) Sodium Methoxide			xxxxx	xxxxx	xxxxx
(4) conc. HCl (12M)			Solution:	xxxxx	xxxxx
(5) trans- 4- tert-BUTYLCYCLO-HEXANOL				Mixture of isomers	both
(6) cis-4-tert-BUTYLCYCLO-HEXANOL					

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

STRUCTURE	VOLUME (mL)	WEIGHT (g)	MOLES (mol)	(mark limiting reactant)
(1)	xxxxx			
(2)	xxxxx			
(4)		Solution: Solute (HCl):		
(5) +(6) Mixture of cis/trans-tert-Butylcyclohexanol	xxxxx			Actual Yield
	xxxxx			Theoretical Yield

PERCENT YIELD: _____

(Show all calculations on back or on separate sheet)