

Carboxylic acid

Name	Acetic acid	Benzoic acid
Mol. Formula	C ₂ H ₄ O ₂	C ₇ H ₆ O ₂
Mol. Structure	H ₃ C—COOH	
Physical state	Liquid	Solid
Solubility	Soluble (Miscible) in water and Acidize	Soluble (Miscible) in NaOH and Acidize
Strong Acidize 1ml or 0.5 g of Acid+Na ₂ CO ₃	Strong	Weak
Bromophenol blue	Yellow pH=3	Yellow pH=3
Conc. H₂SO₄	The smell of acetic acid increases	-----
Esterification 1-1ml of carboxylic acid +Ethanol + Conc .H ₂ SO ₄ +Δ 2-Add to backer contain 10 ml water +Na ₂ CO ₃	The smell of acetic acid increases	-----

Esterification-Page 39

