

Carboxylic Acids

Chemistry

Their reactions, and why they are acidic at all.

The main reactions.

With	Gives
Metal	Salt + hydrogen
Carbonate	Salt + CO ₂ + water — effervescence
Alcohol + acid catalyst	Ester + water
PCl₅	Acyl chloride
LiAlH₄	Primary alcohol
Base	Salt + water

Effervescence with sodium carbonate distinguishes a carboxylic acid from a phenol, which is not acidic enough to react.