

# Carboxylic Acids

Carboxylic acids are hydrocarbons with a carboxyl group.

## General Formula:

### Naming Rules

Prefix: number of carbons in alkane

Ending: -anoic acid –

Ex.  $\text{CH}_3\text{COOH}$

Some carboxylic acids have more than one carboxyl group:

Ex 1. Lactic Acid

Ex 2. Citric Acid

## Properties of Carboxylic Acids

They have the same properties of regular acids (ex. Turn litmus red, react with metals, etc)

Carboxyl group makes all carboxylic acids polar and capable of H-bonding. Therefore they all have high M.P. and B.P.

Short carboxylic acids are soluble in water, but longer ones are insoluble (because of non-polar chain)