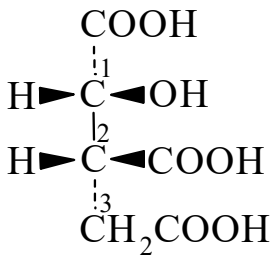
>>**Entry Name: Isocitric acid**
ENTRY UNDER REVIEW
Synonym(s): 1-Hydroxy-1,2,3-propanetricarboxylic acid. 1-Hydroxytricarballylic acid. 3-Carboxy-3,4-dideoxypentaric acid, 9Cl



(1*R*,2*R*)-*form*

CAS Registry Number: 320-77-4
Related CAS Registry Numbers(s): 1637-73-6

Molecular Formula: $C_6H_8O_7$
Molecular Weight: 192.125
Accurate Mass: 192.027005
Percentage Composition: C 37.51%; H 4.20%; O 58.29%

confusion in the application of the *erythro*/*threo* and D/L-stereodescriptors and these should be avoided
pKa Value: pK_{a1} 3.28; pK_{a2} 4.71; pK_{a3} 6.4 (25°) pK_{a1} 3.02; pK_{a2} 4.28; pK_{a3} 5.75 (25°)

>>**Variant:** (1*R*,2*S*)-form
Synonym(s): (+)-*threo*-form. (+)-Isocitric acid

CAS Registry Number: 6061-97-8

Molecular Formula: $C_6H_8O_7$
Molecular Weight: 192.125
Accurate Mass: 192.027005
Percentage Composition: C 37.51%; H 4.20%; O 58.29%
Biological Source: Found in fruit juices. Produced by *Candida* spp. Occurs in blackberry and other Crassulacean plants.
Melting Point: Mp 105°
Optical Rotation: $[\alpha]_D$ +30.6 (H_2O)

>>**Derivative:** Di-Me ester

Molecular Formula: $C_8H_{12}O_7$
Molecular Weight: 220.179
Accurate Mass: 220.058305
Percentage Composition: C 43.64%; H 5.49%; O 50.87%
Melting Point: Mp 106°
Optical Rotation: $[\alpha]_D^{20}$ –63

>>**Derivative:** Tri-Et ester