>>**Entry Name: 2-Propenylpropanedioic acid,** 9CI
Synonym(s): Allylmalonic acid. 1-Butene-4,4-dicarboxylic acid

CAS Registry Number: 2583-25-7
$H_2C{=}CHCH_2CH(COOH)_2$

Molecular Formula: $C_6H_8O_4$
Molecular Weight: 144.127
Accurate Mass: 144.04226
Percentage Composition: C 50.00%; H 5.59%; O 44.40%
Physical Description: Cryst. (Et_2O)
Melting Point: Mp 105°
Solubility: Sol. H_2O, Et_2O, EtOH, hot C_6H_6
pKa Value: pK_a 2.8

Fluka: 6023

>>**Derivative:** Ag salt

Melting Point: Mp 60 dec.°
Solubility: Insol. H_2O

>>**Derivative:** Di-Et ester

CAS Registry Number: 2049-80-1
Molecular Formula: $C_{10}H_{16}O_4$
Molecular Weight: 200.234
Accurate Mass: 200.10486
Percentage Composition: C 59.98%; H 8.05%; O 31.96%
Boiling Point: Bp 222-223°. Bp_6 93°
Aldrich: 44611-4
Fluka: 6022
Sigma: D8635

>>**Derivative:** Amide

Molecular Formula: $C_6H_9NO_3$
Molecular Weight: 143.142
Accurate Mass: 143.058244
Percentage Composition: C 50.35%; H 6.34%; N 9.79%; O 33.53%
Melting Point: Mp 98°
Boiling Point: Bp 289°

References:

Aldrich Library of 13C and 1H FT NMR Spectra, 1992, **1**, 996A, *(nmr)*
Aldrich Library of FT-IR Spectra, 1st edn., 1985, **1**, 646D, *(ir)*
Aldrich Library of FT-IR Spectra: Vapor Phase, 1989, **3**, 692C, *(ir)*
Conrad, M.*, Annalen*, 1880, **204**, 168, *(synth)*