>>**Entry Name: Octanedioic acid,** 9CI
Synonym(s): Suberic acid, 8CI. 1,6-Hexanedicarboxylic acid

CAS Registry Number: 505-48-6

$HOOC(CH_2)_6COOH$

Molecular Formula: $C_8H_{14}O_4$
Molecular Weight: 174.196
Accurate Mass: 174.08921
Percentage Composition: C 55.16%; H 8.10%; O 36.74%
Biological Source: Isol. from stems and leaves of *Anthyllis sericea* and roots of *Phaseolus vulgaris*. Manuf. by oxidative cleavage of cyclooctene
Use/Importance: Used in plastics industry. Monomer for polyesters and polyamides
Physical Description: Cryst. (H_2O or C_6H_6/EtOH)
Melting Point: Mp 144°
Boiling Point: Bp_{100} 279°
Solubility: Insol. H_2O; sol. Et_2O, C_6H_6
pKa Value: pK_{a1} 4.53; pK_{a2} 5.52 (25°, 0.1*M* KNO_3)
Other Data: Subl. >300°

Aldrich: S520-0
Fluka: 60930
Sigma: S7126

>>**Derivative:** Mono-Me ester
Synonym(s): Methyl hydrogen suberate

CAS Registry Number: 3946-32-5
Molecular Formula: $C_9H_{16}O_4$
Molecular Weight: 188.223
Accurate Mass: 188.10486
Percentage Composition: C 57.43%; H 8.57%; O 34.00%
Physical Description: Oil
Melting Point: Mp 14-15°
Boiling Point: Bp_{18} 185-186°
Aldrich: 24244-6

>>**Derivative:** Me ester-chloride
Synonym(s): Methyl 7-(chloroformyl)heptanoate. Methyl suberyl chloride

CAS Registry Number: 41624-92-4
Molecular Formula: $C_9H_{15}ClO_3$
Molecular Weight: 206.668
Accurate Mass: 206.070972
Percentage Composition: C 52.31%; H 7.32%; Cl 17.15%; O 23.22%
Physical Description: Liq.
Refractive Index: n_D^{20} 1.4500
Aldrich: 38556-5
Rare Chemicals Library: S13432-5

>>**Derivative:** Di-Me ester
Synonym(s): Dimethyl suberate

CAS Registry Number: 1732-09-8
Molecular Formula: $C_{10}H_{18}O_4$
Molecular Weight: 202.25
Accurate Mass: 202.12051
Percentage Composition: C 59.39%; H 8.97%; O 31.64%
Physical Description: Oil
Melting Point: Fp –3.1°
Boiling Point: Bp 268°. Bp_9 130-131°
Solubility: Insol. H_2O; sol. EtOH, Et_2O, Me_2CO
Density: d^{20} 1.022
Refractive Index: n_D^{20} 1.4341
Aldrich: 14901-2
Sigma: S6007