ethyl propyl succinate

Inchi: InChI=1S/C9H16O4/c1-3-7-13-9(11)6-5-8(10)12-4-2/h3-7H2,1-2H3
InchiKey: JQFCZPOMQIZGQJ-UHFFFAOYSA-N
Formula: C9H16O4
SMILES: CCCOC(=O)CCC(=O)OCC
Mol. weight [g/mol]: 188.22

Physical Properties

Property code	Value	Unit	Source
gf	-442.94	kJ/mol	Joback Method
hf	-718.69	kJ/mol	Joback Method
hfus	24.64	kJ/mol	Joback Method
hvap	53.94	kJ/mol	Joback Method
log10ws	-1.31		Crippen Method
logp	1.283		Crippen Method
mcvol	152.550	ml/mol	McGowan Method
pc	2525.19	kPa	Joback Method
ripol	1757.00		NIST Webbook
ripol	1759.00		NIST Webbook
ripol	1767.00		NIST Webbook
ripol	1757.00		NIST Webbook
ripol	1767.00		NIST Webbook
ripol	1759.00		NIST Webbook
ripol	1757.00		NIST Webbook
tb	557.90	K	Joback Method
tc	739.72	K	Joback Method
tf	335.51	K	Joback Method
vc	0.588	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	368.05	J/mol×K	557.90	Joback Method
cpg	380.43	J/mol×K	588.20	Joback Method
cpg	392.33	J/mol×K	618.51	Joback Method

cpg	403.74	J/mol×K	648.81	Joback Method
cpg	414.66	J/mol×K	679.11	Joback Method
cpg	425.08	J/mol×K	709.42	Joback Method
cpg	435.00	J/mol×K	739.72	Joback Method
dvisc	0.0019834	Pa×s	335.51	Joback Method
dvisc	0.0011310	Pa×s	372.57	Joback Method
dvisc	0.0007139	Pa×s	409.64	Joback Method
dvisc	0.0004864	Pa×s	446.70	Joback Method
dvisc	0.0003515	Pa×s	483.77	Joback Method
dvisc	0.0002660	Pa×s	520.84	Joback Method
dvisc	0.0002089	Pa×s	557.90	Joback Method

Sources

Crippen Method: https://www.chemeo.com/doc/models/crippen_log10ws
Joback Method: https://en.wikipedia.org/wiki/Joback_method
McGowan Method: http://link.springer.com/article/10.1007/BF02311772
NIST Webbook: http://webbook.nist.gov/cgi/cbook.cgi?ID=R210590&Units=SI
Crippen Method: http://pubs.acs.org/doi/abs/10.1021/ci990307l

Legend

cpg: Ideal gas heat capacity
dvisc: Dynamic viscosity
gf: Standard Gibbs free energy of formation
hf: Enthalpy of formation at standard conditions
hfus: Enthalpy of fusion at standard conditions
hvap: Enthalpy of vaporization at standard conditions
log10ws: Log10 of Water solubility in mol/l
logp: Octanol/Water partition coefficient
mcvol: McGowan's characteristic volume
pc: Critical Pressure
ripol: Polar retention indices
tb: Normal Boiling Point Temperature
tc: Critical Temperature
tf: Normal melting (fusion) point
vc: Critical Volume