

Glutaric acid, ethyl propyl ester

Inchi:	InChI=1S/C10H18O4/c1-3-8-14-10(12)7-5-6-9(11)13-4-2/h3-8H2,1-2H3
InchiKey:	WJINUXOOLPNQSV-UHFFFAOYSA-N
Formula:	C10H18O4
SMILES:	CCCOC(=O)CCCC(=O)OCC
Mol. weight [g/mol]:	202.25

Physical Properties

Property code	Value	Unit	Source
gf	-434.52	kJ/mol	Joback Method
hf	-739.33	kJ/mol	Joback Method
hfus	27.23	kJ/mol	Joback Method
hvap	56.17	kJ/mol	Joback Method
log10ws	-1.73		Crippen Method
logp	1.673		Crippen Method
mcvol	166.640	ml/mol	McGowan Method
pc	2298.11	kPa	Joback Method
rinqol	1414.00		NIST Webbook
tb	580.78	K	Joback Method
tc	760.87	K	Joback Method
tf	346.78	K	Joback Method
vc	0.643	m ³ /kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	415.69	J/molxK	580.78	Joback Method
cpg	428.88	J/molxK	610.80	Joback Method
cpg	441.54	J/molxK	640.81	Joback Method
cpg	453.66	J/molxK	670.83	Joback Method
cpg	465.23	J/molxK	700.84	Joback Method
cpg	476.26	J/molxK	730.86	Joback Method
cpg	486.74	J/molxK	760.87	Joback Method
dvisc	0.0019074	Paxs	346.78	Joback Method
dvisc	0.0010682	Paxs	385.78	Joback Method

dvisc	0.0006655	Paxs	424.78	Joback Method
dvisc	0.0004489	Paxs	463.78	Joback Method
dvisc	0.0003219	Paxs	502.78	Joback Method
dvisc	0.0002421	Paxs	541.78	Joback Method
dvisc	0.0001892	Paxs	580.78	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=U360000&Units=SI
Crippen Method:	http://pubs.acs.org/doi/abs/10.1021/ci9903071

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
rinpol:	Non-polar retention indices
tb:	Normal Boiling Point Temperature
tc:	Critical Temperature
tf:	Normal melting (fusion) point
vc:	Critical Volume

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