Glutaric acid, ethyl 1-naphthyl ester

Inchi: InChI=1S/C17H18O4/c1-2-20-16(18)11-6-12-17(19)21-15-10-5-8-13-7-3-4-9-14(13)15/h3
InchiKey: LJNAOGVWAWXGAZ-UHFFFAOYSA-N
Formula: C17H18O4
SMILES: CCOC(=O)CCCC(=O)Oc1cccc2ccccc12
Mol. weight [g/mol]: 286.32

Physical Properties

Property code	Value	Unit	Source
gf	-166.15	kJ/mol	Joback Method
hf	-467.68	kJ/mol	Joback Method
hfus	36.03	kJ/mol	Joback Method
hvap	76.33	kJ/mol	Joback Method
log10ws	-4.55		Crippen Method
logp	3.479		Crippen Method
mcvol	222.050	ml/mol	McGowan Method
pc	2071.76	kPa	Joback Method
rinpol	2381.00		NIST Webbook
rinpol	2381.00		NIST Webbook
tb	791.58	K	Joback Method
tc	1010.50	K	Joback Method
tf	497.31	K	Joback Method
vc	0.850	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	633.40	J/mol×K	791.58	Joback Method
cpg	647.17	J/mol×K	828.07	Joback Method
cpg	659.92	J/mol×K	864.55	Joback Method
cpg	671.70	J/mol×K	901.04	Joback Method
cpg	682.54	J/mol×K	937.53	Joback Method
cpg	692.49	J/mol×K	974.01	Joback Method
cpg	701.60	J/mol×K	1010.50	Joback Method
dvisc	0.0008938	Pa×s	497.31	Joback Method

dvisc	0.0005867	Pa×s	546.36	Joback Method
dvisc	0.0004128	Pa×s	595.40	Joback Method
dvisc	0.0003064	Pa×s	644.45	Joback Method
dvisc	0.0002372	Pa×s	693.49	Joback Method
dvisc	0.0001899	Pa×s	742.54	Joback Method
dvisc	0.0001563	Pa×s	791.58	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=U358762&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
rinpol:	Non-polar retention indices
tb:	Normal Boiling Point Temperature
tc:	Critical Temperature
tf:	Normal melting (fusion) point
vc:	Critical Volume