Glutaric acid, di(pent-4-enyl) ester

Inchi: InChI=1S/C15H24O4/c1-3-5-7-12-18-14(16)10-9-11-15(17)19-13-8-6-4-2/h3-4H,1-2,5-13
InchiKey: YBGGVDVUTAQJBY-UHFFFAOYSA-N
Formula: C15H24O4
SMILES: C=CCCCOC(=O)CCCC(=O)OCCCC=C
Mol. weight [g/mol]: 268.35

Physical Properties

Property code	Value	Unit	Source
gf	-216.74	kJ/mol	Joback Method
hf	-591.67	kJ/mol	Joback Method
hfus	37.62	kJ/mol	Joback Method
hvap	65.96	kJ/mol	Joback Method
log10ws	-3.53		Crippen Method
logp	3.175		Crippen Method
mcvol	228.490	ml/mol	McGowan Method
pc	1623.29	kPa	Joback Method
rinpol	1899.00		NIST Webbook
rinpol	1899.00		NIST Webbook
tb	688.54	K	Joback Method
tc	868.31	K	Joback Method
tf	399.61	K	Joback Method
vc	0.885	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	629.63	J/mol×K	688.54	Joback Method
cpg	697.57	J/mol×K	838.35	Joback Method
cpg	685.43	J/mol×K	808.39	Joback Method
cpg	672.58	J/mol×K	778.42	Joback Method
cpg	659.01	J/mol×K	748.46	Joback Method
cpg	644.69	J/mol×K	718.50	Joback Method
cpg	709.00	J/mol×K	868.31	Joback Method
dvisc	0.0001171	Pa×s	688.54	Joback Method

dvisc	0.0001511	Pa×s	640.38	Joback Method
dvisc	0.0002031	Pa×s	592.23	Joback Method
dvisc	0.0002876	Pa×s	544.07	Joback Method
dvisc	0.0004358	Pa×s	495.92	Joback Method
dvisc	0.0007223	Pa×s	447.76	Joback Method
dvisc	0.0013518	Pa×s	399.61	Joback Method

Sources

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=U359998&Units=SI
Crippen Method:	http://pubs.acs.org/doi/abs/10.1021/ci990307l
Crippen Method:	https://www.chemeo.com/doc/models/crippen_log10ws

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