Glutaric acid, isobutyl pent-4-enyl ester

Inchi: InChI=1S/C14H24O4/c1-4-5-6-10-17-13(15)8-7-9-14(16)18-11-12(2)3/h4,12H,1,5-11H2,2
InchiKey: BUNWBVSNMTYPBP-UHFFFAOYSA-N
Formula: C14H24O4
SMILES: C=CCCCOC(=O)CCCC(=O)OCC(C)C
Mol. weight [g/mol]: 256.34

Physical Properties

Property code	Value	Unit	Source
gf	-315.44	kJ/mol	Joback Method
hf	-701.74	kJ/mol	Joback Method
hfus	32.79	kJ/mol	Joback Method
hvap	64.01	kJ/mol	Joback Method
log10ws	-3.02		Crippen Method
logp	2.865		Crippen Method
mcvol	218.700	ml/mol	McGowan Method
pc	1707.53	kPa	Joback Method
rinpol	1754.00		NIST Webbook
rinpol	1754.00		NIST Webbook
tb	668.54	K	Joback Method
tc	849.17	K	Joback Method
tf	375.10	K	Joback Method
vc	0.843	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	599.41	J/mol×K	668.54	Joback Method
cpg	668.83	J/mol×K	819.06	Joback Method
cpg	656.40	J/mol×K	788.96	Joback Method
cpg	643.26	J/mol×K	758.85	Joback Method
cpg	629.38	J/mol×K	728.75	Joback Method
cpg	614.77	J/mol×K	698.64	Joback Method
cpg	680.53	J/mol×K	849.17	Joback Method
dvisc	0.0001168	Pa×s	668.54	Joback Method

dvisc	0.0001539	Pa×s	619.63	Joback Method
dvisc	0.0002126	Pa×s	570.73	Joback Method
dvisc	0.0003121	Pa×s	521.82	Joback Method
dvisc	0.0004960	Pa×s	472.91	Joback Method
dvisc	0.0008773	Pa×s	424.01	Joback Method
dvisc	0.0018004	Pa×s	375.10	Joback Method

Sources

NIST Webbook:	http://webbook.nist.gov/cgi/cbook.cgi?ID=U359982&Units=SI
Crippen Method:	http://pubs.acs.org/doi/abs/10.1021/ci990307l
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

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