

Glutaric acid, butyl 2-ethoxyethyl ester

Inchi:	InChI=1S/C13H24O5/c1-3-5-9-17-12(14)7-6-8-13(15)18-11-10-16-4-2/h3-11H2,1-2H3
InchiKey:	AEJSQULXWPVHCH-UHFFFAOYSA-N
Formula:	C13H24O5
SMILES:	CCCCOC(=O)CCCC(=O)OCCOCC
Mol. weight [g/mol]:	260.33

Physical Properties

Property code	Value	Unit	Source
gf	-514.26	kJ/mol	Joback Method
hf	-933.47	kJ/mol	Joback Method
hfus	36.19	kJ/mol	Joback Method
hvap	65.25	kJ/mol	Joback Method
log10ws	-2.08		Crippen Method
logp	2.080		Crippen Method
mcvol	214.780	ml/mol	McGowan Method
pc	1749.21	kPa	Joback Method
rinpol	1787.00		NIST Webbook
tb	671.84	K	Joback Method
tc	848.38	K	Joback Method
tf	402.82	K	Joback Method
vc	0.830	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	596.49	J/molxK	671.84	Joback Method
cpg	664.37	J/molxK	818.96	Joback Method
cpg	652.19	J/molxK	789.54	Joback Method
cpg	639.30	J/molxK	760.11	Joback Method
cpg	625.72	J/molxK	730.69	Joback Method
cpg	611.45	J/molxK	701.26	Joback Method
cpg	675.85	J/molxK	848.38	Joback Method
dvisc	0.0001046	Paxs	671.84	Joback Method
dvisc	0.0001350	Paxs	627.00	Joback Method

dvisc	0.0001811	Paxs	582.17	Joback Method
dvisc	0.0002553	Paxs	537.33	Joback Method
dvisc	0.0003829	Paxs	492.49	Joback Method
dvisc	0.0006229	Paxs	447.66	Joback Method
dvisc	0.0011295	Paxs	402.82	Joback Method

Sources

McGowan Method:	http://link.springer.com/article/10.1007/BF02311772
NIST Webbook:	http://webbook.nist.gov/cgi/cbook.cgi?ID=U359619&Units=SI
Crippen Method:	http://pubs.acs.org/doi/abs/10.1021/ci9903071
Crippen Method:	https://www.chemeo.com/doc/models/crippen_log10ws
Joback Method:	https://en.wikipedia.org/wiki/Joback_method

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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