Glutaric acid, butyl 2-methoxyethyl ester

Inchi: InChI=1S/C12H22O5/c1-3-4-8-16-11(13)6-5-7-12(14)17-10-9-15-2/h3-10H2,1-2H3
InchiKey: GDZOHHDRJNORKP-UHFFFAOYSA-N
Formula: C12H22O5
SMILES: CCCCOC(=O)CCCC(=O)OCCOC
Mol. weight [g/mol]: 246.30

Physical Properties

Property code	Value	Unit	Source
gf	-522.68	kJ/mol	Joback Method
hf	-912.83	kJ/mol	Joback Method
hfus	33.60	kJ/mol	Joback Method
hvap	63.03	kJ/mol	Joback Method
log10ws	-1.66		Crippen Method
logp	1.690		Crippen Method
mcvol	200.690	ml/mol	McGowan Method
pc	1898.60	kPa	Joback Method
rinpol	1727.00		NIST Webbook
tb	648.96	K	Joback Method
tc	826.09	K	Joback Method
tf	391.55	K	Joback Method
vc	0.773	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	543.30	J/mol×K	648.96	Joback Method
cpg	608.90	J/mol×K	796.57	Joback Method
cpg	597.08	J/mol×K	767.04	Joback Method
cpg	584.60	J/mol×K	737.52	Joback Method
cpg	571.47	J/mol×K	708.00	Joback Method
cpg	557.70	J/mol×K	678.48	Joback Method
cpg	620.07	J/mol×K	826.09	Joback Method
dvisc	0.0001185	Pa×s	648.96	Joback Method
dvisc	0.0001522	Pa×s	606.06	Joback Method

dvisc	0.0002032	Pa×s	563.16	Joback Method
dvisc	0.0002846	Pa×s	520.25	Joback Method
dvisc	0.0004234	Pa×s	477.35	Joback Method
dvisc	0.0006812	Pa×s	434.45	Joback Method
dvisc	0.0012164	Pa×s	391.55	Joback Method

Sources

McGowan Method:	http://link.springer.com/article/10.1007/BF02311772
NIST Webbook:	http://webbook.nist.gov/cgi/cbook.cgi?ID=U360101&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

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