Glutaric acid, ethyl 4-methoxy-2-methylbutyl ester

Inchi: InChI=1S/C13H24O5/c1-4-17-12(14)6-5-7-13(15)18-10-11(2)8-9-16-3/h11H,4-10H2,1-3H

InchiKey: UQKPDILVOYDQOW-UHFFFAOYSA-N

Formula: C13H24O5

SMILES: CCOC(=O)CCCC(=O)OCC(C)CCOC

Mol. weight [g/mol]: 260.33

Physical Properties

Property code	Value	Unit	Source
gf	-516.70	kJ/mol	Joback Method
hf	-938.75	kJ/mol	Joback Method
hfus	32.66	kJ/mol	Joback Method
hvap	64.87	kJ/mol	Joback Method
log10ws	-1.83		Crippen Method
logp	1.936		Crippen Method
mcvol	214.780	ml/mol	McGowan Method
pc	1760.97	kPa	Joback Method
rinpol	1775.00		NIST Webbook
rinpol	1775.00		NIST Webbook
tb	671.40	K	Joback Method
tc	850.36	K	Joback Method
tf	387.82	K	Joback Method
vc	0.824	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	596.96	J/mol×K	671.40	Joback Method
cpg	612.15	J/mol×K	701.23	Joback Method
cpg	626.63	J/mol×K	731.05	Joback Method
cpg	640.40	J/mol×K	760.88	Joback Method
cpg	653.44	J/mol×K	790.71	Joback Method
cpg	665.75	J/mol×K	820.53	Joback Method
cpg	677.33	J/mol×K	850.36	Joback Method
dvisc	0.0013703	Pa×s	387.82	Joback Method

dvisc	0.0006936	Pa×s	435.08	Joback Method
dvisc	0.0004012	Pa×s	482.35	Joback Method
dvisc	0.0002559	Pa×s	529.61	Joback Method
dvisc	0.0001757	Pa×s	576.87	Joback Method
dvisc	0.0001277	Pa×s	624.14	Joback Method
dvisc	0.0000971	Pa×s	671.40	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=U359409&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