Sebacic acid, butyl 2-methoxyethyl ester

Inchi: InChI=1S/C17H32O5/c1-3-4-13-21-16(18)11-9-7-5-6-8-10-12-17(19)22-15-14-20-2/h3-15
InchiKey: HMWKQSOUQAYPAC-UHFFFAOYSA-N
Formula: C17H32O5
SMILES: CCCCOC(=O)CCCCCCCCC(=O)OCCOC
Mol. weight [g/mol]: 316.43

Physical Properties

Property code	Value	Unit	Source
gf	-480.58	kJ/mol	Joback Method
hf	-1016.03	kJ/mol	Joback Method
hfus	46.55	kJ/mol	Joback Method
hvap	74.16	kJ/mol	Joback Method
log10ws	-3.75		Crippen Method
logp	3.640		Crippen Method
mcvol	271.140	ml/mol	McGowan Method
pc	1298.60	kPa	Joback Method
rinpol	2212.00		NIST Webbook
tb	763.36	K	Joback Method
tc	942.36	K	Joback Method
tf	447.90	K	Joback Method
vc	1.054	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	821.57	J/mol×K	763.36	Joback Method
cpg	838.37	J/mol×K	793.19	Joback Method
cpg	854.26	J/mol×K	823.03	Joback Method
cpg	869.24	J/mol×K	852.86	Joback Method
cpg	883.32	J/mol×K	882.69	Joback Method
cpg	896.49	J/mol×K	912.53	Joback Method
cpg	908.76	J/mol×K	942.36	Joback Method
dvisc	0.0007897	Pa×s	447.90	Joback Method
dvisc	0.0004124	Pa×s	500.48	Joback Method

dvisc	0.0002437	Pa×s	553.05	Joback Method
dvisc	0.0001578	Pa×s	605.63	Joback Method
dvisc	0.0001095	Pa×s	658.21	Joback Method
dvisc	0.0000802	Pa×s	710.78	Joback Method
dvisc	0.0000613	Pa×s	763.36	Joback Method

Sources

NIST Webbook:	http://webbook.nist.gov/cgi/cbook.cgi?ID=U355755&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