Glutaric acid, di(7-bromoheptyl) ester

Inchi: InChI=1S/C19H34Br2O4/c20-14-7-3-1-5-9-16-24-18(22)12-11-13-19(23)25-17-10-6-2-4-8
InchiKey: PTYYYNBYGLSVSU-UHFFFAOYSA-N
Formula: C19H34Br2O4
SMILES: O=C(CCCC(=O)OCCCCCCCBr)OCCCCCCCBr
Mol. weight [g/mol]: 486.28

Physical Properties

Property code	Value	Unit	Source
gf	-330.10	kJ/mol	Joback Method
hf	-872.43	kJ/mol	Joback Method
hfus	61.11	kJ/mol	Joback Method
hvap	89.07	kJ/mol	Joback Method
log10ws	-6.36		Crippen Method
logp	5.934		Crippen Method
mcvol	328.450	ml/mol	McGowan Method
pc	1264.65	kPa	Joback Method
rinpol	3053.00		NIST Webbook
rinpol	3053.00		NIST Webbook
tb	919.02	K	Joback Method
tc	1126.00	K	Joback Method
tf	567.81	K	Joback Method
vc	1.272	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	998.87	J/mol×K	919.02	Joback Method
cpg	1014.01	J/mol×K	953.52	Joback Method
cpg	1028.09	J/mol×K	988.01	Joback Method
cpg	1041.14	J/mol×K	1022.51	Joback Method
cpg	1053.19	J/mol×K	1057.01	Joback Method
cpg	1064.30	J/mol×K	1091.50	Joback Method
cpg	1074.48	J/mol×K	1126.00	Joback Method
dvisc	0.0003532	Pa×s	567.81	Joback Method

dvisc	0.0002017	Pa×s	626.35	Joback Method
dvisc	0.0001267	Pa×s	684.88	Joback Method
dvisc	0.0000857	Pa×s	743.41	Joback Method
dvisc	0.0000613	Pa×s	801.95	Joback Method
dvisc	0.0000459	Pa×s	860.49	Joback Method
dvisc	0.0000357	Pa×s	919.02	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=U380505&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