Glutaric acid, 2-(cyclohexyl)ethyl ethyl ester

Inchi: InChI=1S/C15H26O4/c1-2-18-14(16)9-6-10-15(17)19-12-11-13-7-4-3-5-8-13/h13H,2-12H
InchiKey: CZGZLGOLYIYXDV-UHFFFAOYSA-N
Formula: C15H26O4
SMILES: CCOC(=O)CCCC(=O)OCCC1CCCCC1
Mol. weight [g/mol]: 270.36

Physical Properties

Property code	Value	Unit	Source
gf	-367.97	kJ/mol	Joback Method
hf	-788.21	kJ/mol	Joback Method
hfus	32.01	kJ/mol	Joback Method
hvap	67.72	kJ/mol	Joback Method
log10ws	-3.48		Crippen Method
logp	3.233		Crippen Method
mcvol	226.230	ml/mol	McGowan Method
pc	1793.94	kPa	Joback Method
rinpol	1881.00		NIST Webbook
tb	714.73	K	Joback Method
tc	912.53	K	Joback Method
tf	410.51	K	Joback Method
vc	0.857	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	671.91	J/mol×K	714.73	Joback Method
cpg	690.03	J/mol×K	747.70	Joback Method
cpg	707.06	J/mol×K	780.66	Joback Method
cpg	723.01	J/mol×K	813.63	Joback Method
cpg	737.89	J/mol×K	846.59	Joback Method
cpg	751.70	J/mol×K	879.56	Joback Method
cpg	764.46	J/mol×K	912.53	Joback Method
dvisc	0.0016086	Pa×s	410.51	Joback Method
dvisc	0.0008053	Pa×s	461.21	Joback Method

dvisc	0.0004624	Pa×s	511.92	Joback Method
dvisc	0.0002934	Pa×s	562.62	Joback Method
dvisc	0.0002007	Pa×s	613.32	Joback Method
dvisc	0.0001455	Pa×s	664.03	Joback Method
dvisc	0.0001104	Pa×s	714.73	Joback Method

Sources

NIST Webbook:	http://webbook.nist.gov/cgi/cbook.cgi?ID=U405426&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