Glutaric acid, 2-(4-chlorophenyl)ethyl ethyl ester

Inchi: InChI=1S/C15H19ClO4/c1-2-19-14(17)4-3-5-15(18)20-11-10-12-6-8-13(16)9-7-12/h6-9H,

InchiKey: PGBOGSJDIIGIEW-UHFFFAOYSA-N

Formula: C15H19ClO4

SMILES: CCOC(=O)CCCC(=O)OCCc1ccc(Cl)cc1

Mol. weight [g/mol]: 298.76

Physical Properties

Property code	Value	Unit	Source
gf	-301.57	kJ/mol	Joback Method
hf	-633.21	kJ/mol	Joback Method
hfus	38.03	kJ/mol	Joback Method
hvap	74.62	kJ/mol	Joback Method
log10ws	-3.61		Crippen Method
logp	3.159		Crippen Method
mcvol	225.570	ml/mol	McGowan Method
pc	1911.91	kPa	Joback Method
rinpol	2220.00		NIST Webbook
tb	764.27	K	Joback Method
tc	971.48	K	Joback Method
tf	471.99	K	Joback Method
vc	0.865	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	620.06	J/mol×K	764.27	Joback Method
cpg	633.75	J/mol×K	798.81	Joback Method
cpg	646.48	J/mol×K	833.34	Joback Method
cpg	658.28	J/mol×K	867.88	Joback Method
cpg	669.14	J/mol×K	902.41	Joback Method
cpg	679.09	J/mol×K	936.95	Joback Method
cpg	688.14	J/mol×K	971.48	Joback Method
dvisc	0.0007853	Pa×s	471.99	Joback Method
dvisc	0.0004679	Pa×s	520.70	Joback Method

dvisc	0.0003046	Pa×s	569.42	Joback Method
dvisc	0.0002121	Pa×s	618.13	Joback Method
dvisc	0.0001558	Pa×s	666.84	Joback Method
dvisc	0.0001193	Pa×s	715.56	Joback Method
dvisc	0.0000945	Pa×s	764.27	Joback Method

Sources

NIST Webbook: http://webbook.nist.gov/cgi/cbook.cgi?ID=U377298&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