Glutaric acid, 3-chlorophenyl (2-naphthyl)methyl ester

Inchi: InChI=1S/C22H19ClO4/c23-19-7-3-8-20(14-19)27-22(25)10-4-9-21(24)26-15-16-11-12-1

InchiKey: HKADCJOEKOFVBN-UHFFFAOYSA-N

Formula: C22H19ClO4

SMILES: O=C(CCCC(=O)Oc1cccc(Cl)c1)OCc1ccc2ccccc2c1

Mol. weight [g/mol]: 382.84

Physical Properties

Property code	Value	Unit	Source
gf	-33.20	kJ/mol	Joback Method
hf	-361.56	kJ/mol	Joback Method
hfus	46.83	kJ/mol	Joback Method
hvap	94.78	kJ/mol	Joback Method
log10ws	-6.92		Crippen Method
logp	5.312		Crippen Method
mcvol	280.980	ml/mol	McGowan Method
pc	1739.01	kPa	Joback Method
rinpol	3235.00		NIST Webbook
rinpol	3235.00		NIST Webbook
tb	975.07	K	Joback Method
tc	1217.08	K	Joback Method
tf	622.52	K	Joback Method
vc	1.071	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	836.46	J/mol×K	975.07	Joback Method
cpg	883.67	J/mol×K	1176.74	Joback Method
cpg	876.14	J/mol×K	1136.41	Joback Method
cpg	867.74	J/mol×K	1096.07	Joback Method
cpg	858.39	J/mol×K	1055.74	Joback Method
cpg	847.99	J/mol×K	1015.40	Joback Method
cpg	890.40	J/mol×K	1217.08	Joback Method
dvisc	0.0000774	Pa×s	975.07	Joback Method

dvisc	0.0000940	Pa×s	916.31	Joback Method
dvisc	0.0001173	Pa×s	857.55	Joback Method
dvisc	0.0001512	Pa×s	798.79	Joback Method
dvisc	0.0002028	Pa×s	740.04	Joback Method
dvisc	0.0002863	Pa×s	681.28	Joback Method
dvisc	0.0004312	Pa×s	622.52	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=U392206&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