Glutaric acid, 2-decyl 2,4-dichloro-1-naphthyl ester

Inchi: InChI=1S/C25H32Cl2O4/c1-3-4-5-6-7-8-12-18(2)30-23(28)15-11-16-24(29)31-25-20-14-1

InchiKey: FVYSPBKEKMBINP-UHFFFAOYSA-N

Formula: C25H32Cl2O4

SMILES: CCCCCCCCC(C)OC(=O)CCCC(=O)Oc1c(Cl)cc(Cl)c2ccccc12

Mol. weight [g/mol]: 467.43

Physical Properties

Property code	Value	Unit	Source
gf	-144.35	kJ/mol	Joback Method
hf	-692.50	kJ/mol	Joback Method
hfus	60.84	kJ/mol	Joback Method
hvap	103.84	kJ/mol	Joback Method
log10ws	-9.38		Crippen Method
logp	7.905		Crippen Method
mcvol	359.250	ml/mol	McGowan Method
pc	1067.27	kPa	Joback Method
rinpol	3341.00		NIST Webbook
rinpol	3341.00		NIST Webbook
tb	1059.00	K	Joback Method
tc	1296.57	K	Joback Method
tf	657.35	K	Joback Method
vc	1.389	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	1145.04	J/mol×K	1059.00	Joback Method
cpg	1199.45	J/mol×K	1256.97	Joback Method
cpg	1190.78	J/mol×K	1217.38	Joback Method
cpg	1181.08	J/mol×K	1177.78	Joback Method
cpg	1170.27	J/mol×K	1138.19	Joback Method
cpg	1158.29	J/mol×K	1098.59	Joback Method
cpg	1207.17	J/mol×K	1296.57	Joback Method
dvisc	0.0000383	Pa×s	1059.00	Joback Method

dvisc	0.0000475	Pa×s	992.06	Joback Method
dvisc	0.0000607	Pa×s	925.12	Joback Method
dvisc	0.0000806	Pa×s	858.17	Joback Method
dvisc	0.0001123	Pa×s	791.23	Joback Method
dvisc	0.0001663	Pa×s	724.29	Joback Method
dvisc	0.0002668	Pa×s	657.35	Joback Method

Sources

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
NIST Webbook:	http://webbook.nist.gov/cgi/cbook.cgi?ID=U392026&Units=SI

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