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

Inchi: InChI=1S/C22H24Cl2O4/c23-18-13-19(24)22(17-10-5-4-9-16(17)18)28-21(26)12-6-11-20

InchiKey: DGYJOKISDOJQOX-UHFFFAOYSA-N

Formula: C22H24Cl2O4

SMILES: O=C(CCCC(=O)Oc1c(Cl)cc(Cl)c2ccccc12)OCC1CCCCC1

Mol. weight [g/mol]: 423.33

Physical Properties

Property code	Value	Unit	Source
gf	-142.72	kJ/mol	Joback Method
hf	-570.98	kJ/mol	Joback Method
hfus	48.43	kJ/mol	Joback Method
hvap	97.98	kJ/mol	Joback Method
log10ws	-7.66		Crippen Method
logp	6.346		Crippen Method
mcvol	306.120	ml/mol	McGowan Method
pc	1506.98	kPa	Joback Method
rinpol	3310.00		NIST Webbook
rinpol	3310.00		NIST Webbook
tb	1010.35	K	Joback Method
tc	1252.78	K	Joback Method
tf	645.92	K	Joback Method
vc	1.161	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	955.91	J/mol×K	1010.35	Joback Method
cpg	968.10	J/mol×K	1050.76	Joback Method
cpg	978.89	J/mol×K	1091.16	Joback Method
cpg	988.36	J/mol×K	1131.57	Joback Method
cpg	996.58	J/mol×K	1171.97	Joback Method
cpg	1003.62	J/mol×K	1212.38	Joback Method
cpg	1009.56	J/mol×K	1252.78	Joback Method
dvisc	0.0003957	Pa×s	645.92	Joback Method

dvisc	0.0002596	Pa×s	706.66	Joback Method
dvisc	0.0001820	Pa×s	767.40	Joback Method
dvisc	0.0001345	Pa×s	828.13	Joback Method
dvisc	0.0001036	Pa×s	888.87	Joback Method
dvisc	0.0000825	Pa×s	949.61	Joback Method
dvisc	0.0000675	Pa×s	1010.35	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=U392025&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