Glutaric acid, 2,4-dichloronaphthyl pentyl ester

Inchi: InChI=1S/C20H22Cl2O4/c1-2-3-6-12-25-18(23)10-7-11-19(24)26-20-15-9-5-4-8-14(15)16

InchiKey: OKFCVGOJNDBCCG-UHFFFAOYSA-N

Formula: C20H22Cl2O4

SMILES: CCCCCOC(=O)CCCC(=O)Oc1c(Cl)cc(Cl)c2ccccc12

Mol. weight [g/mol]: 397.29

Physical Properties

Property code	Value	Unit	Source
gf	-184.01	kJ/mol	Joback Method
hf	-584.02	kJ/mol	Joback Method
hfus	51.42	kJ/mol	Joback Method
hvap	93.10	kJ/mol	Joback Method
log10ws	-7.17		Crippen Method
logp	5.956		Crippen Method
mcvol	288.800	ml/mol	McGowan Method
pc	1491.89	kPa	Joback Method
rinpol	3016.00		NIST Webbook
rinpol	3016.00		NIST Webbook
tb	945.04	K	Joback Method
tc	1169.38	K	Joback Method
tf	616.00	K	Joback Method
vc	1.115	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	846.89	J/mol×K	945.04	Joback Method
cpg	858.98	J/mol×K	982.43	Joback Method
cpg	870.02	J/mol×K	1019.82	Joback Method
cpg	880.07	J/mol×K	1057.21	Joback Method
cpg	889.17	J/mol×K	1094.60	Joback Method
cpg	897.37	J/mol×K	1131.99	Joback Method
cpg	904.71	J/mol×K	1169.38	Joback Method
dvisc	0.0004330	Pa×s	616.00	Joback Method

dvisc	0.0002965	Pa×s	670.84	Joback Method
dvisc	0.0002149	Pa×s	725.68	Joback Method
dvisc	0.0001630	Pa×s	780.52	Joback Method
dvisc	0.0001282	Pa×s	835.36	Joback Method
dvisc	0.0001039	Pa×s	890.20	Joback Method
dvisc	0.0000862	Pa×s	945.04	Joback Method

Sources

McGowan Method:	http://link.springer.com/article/10.1007/BF02311772
NIST Webbook:	http://webbook.nist.gov/cgi/cbook.cgi?ID=U358924&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

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