Glutaric acid, naphth-2-ylmethyl 5-methyl-2-methoxybenzyl ester

Inchi: InChI=1S/C24H24O5/c1-17-10-13-21(27-2)22(14-17)29-24(26)9-5-8-23(25)28-16-18-11-

InchiKey: OZFVOIKMZOIJDR-UHFFFAOYSA-N

Formula: C24H24O5

SMILES: COc1ccc(C)cc1OC(=O)CCCC(=O)OCc1ccc2ccccc2c1

Mol. weight [g/mol]: 392.44

Physical Properties

Property code	Value	Unit	Source
gf	-119.06	kJ/mol	Joback Method
hf	-530.79	kJ/mol	Joback Method
hfus	48.61	kJ/mol	Joback Method
hvap	97.92	kJ/mol	Joback Method
log10ws	-6.83		Crippen Method
logp	4.976		Crippen Method
mcvol	302.790	ml/mol	McGowan Method
pc	1496.51	kPa	Joback Method
rinpol	3346.00		NIST Webbook
tb	1010.80	K	Joback Method
tc	1248.42	K	Joback Method
tf	649.89	K	Joback Method
vc	1.151	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	957.58	J/mol×K	1010.80	Joback Method
cpg	969.44	J/mol×K	1050.40	Joback Method
cpg	979.93	J/mol×K	1090.01	Joback Method
cpg	989.10	J/mol×K	1129.61	Joback Method
cpg	997.00	J/mol×K	1169.21	Joback Method
cpg	1003.70	J/mol×K	1208.81	Joback Method
cpg	1009.24	J/mol×K	1248.42	Joback Method
dvisc	0.0002788	Pa×s	649.89	Joback Method
dvisc	0.0001875	Pa×s	710.04	Joback Method

dvisc	0.0001341	Pa×s	770.19	Joback Method
dvisc	0.0001007	Pa×s	830.35	Joback Method
dvisc	0.0000786	Pa×s	890.50	Joback Method
dvisc	0.0000633	Pa×s	950.65	Joback Method
dvisc	0.0000523	Pa×s	1010.80	Joback Method

Sources

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=U393935&Units=SI
Crippen Method:	http://pubs.acs.org/doi/abs/10.1021/ci990307l

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