

Glutaric acid, decyl 2-phenoxyethyl ester

Inchi:	InChI=1S/C23H36O5/c1-2-3-4-5-6-7-8-12-18-27-22(24)16-13-17-23(25)28-20-19-26-21-
InchiKey:	JNKMQUFUUWCP-UHFFFAOYSA-N
Formula:	C23H36O5
SMILES:	CCCCCCCCCOC(=O)CCCC(=O)OCCOc1ccccc1
Mol. weight [g/mol]:	392.53

Physical Properties

Property code	Value	Unit	Source
gf	-317.65	kJ/mol	Joback Method
hf	-903.34	kJ/mol	Joback Method
hfus	56.13	kJ/mol	Joback Method
hvap	89.79	kJ/mol	Joback Method
log10ws	-6.01		Crippen Method
logp	5.463		Crippen Method
mvol	331.920	ml/mol	McGowan Method
pc	1096.44	kPa	Joback Method
rinpol	2905.00		NIST Webbook
rinpol	2905.00		NIST Webbook
tb	927.32	K	Joback Method
tc	1135.98	K	Joback Method
tf	541.94	K	Joback Method
vc	1.282	m ³ /kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	1088.48	J/molxK	927.32	Joback Method
cpg	1156.12	J/molxK	1101.20	Joback Method
cpg	1145.31	J/molxK	1066.43	Joback Method
cpg	1133.17	J/molxK	1031.65	Joback Method
cpg	1119.66	J/molxK	996.87	Joback Method
cpg	1104.78	J/molxK	962.10	Joback Method
cpg	1165.63	J/molxK	1135.98	Joback Method
dvisc	0.0000260	Paxs	927.32	Joback Method

dvisc	0.0000340	Paxs	863.09	Joback Method
dvisc	0.0000466	Paxs	798.86	Joback Method
dvisc	0.0000674	Paxs	734.63	Joback Method
dvisc	0.0001045	Paxs	670.40	Joback Method
dvisc	0.0001780	Paxs	606.17	Joback Method
dvisc	0.0003438	Paxs	541.94	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=U376922&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

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