Glutaric acid, diamide, N,N'-di(3-pentyl)-

Inchi: InChI=1S/C15H30N2O2/c1-5-12(6-2)16-14(18)10-9-11-15(19)17-13(7-3)8-4/h12-13H,5-1
InchiKey: VXBPNCAWOBKPRD-UHFFFAOYSA-N
Formula: C15H30N2O2
SMILES: CCC(CC)NC(=O)CCCC(=O)NC(CC)CC
Mol. weight [g/mol]: 270.41

Physical Properties

Property code	Value	Unit	Source
gf	-8.52	kJ/mol	Joback Method
hf	-481.71	kJ/mol	Joback Method
hfus	40.96	kJ/mol	Joback Method
hvap	74.57	kJ/mol	Joback Method
log10ws	-4.25		Crippen Method
logp	2.766		Crippen Method
mcvol	245.310	ml/mol	McGowan Method
pc	1612.88	kPa	Joback Method
rinpol	2171.00		NIST Webbook
rinpol	2171.00		NIST Webbook
tb	749.80	K	Joback Method
tc	936.16	K	Joback Method
tf	433.99	K	Joback Method
vc	0.946	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	739.43	J/mol×K	749.80	Joback Method
cpg	755.60	J/mol×K	780.86	Joback Method
cpg	770.88	J/mol×K	811.92	Joback Method
cpg	785.29	J/mol×K	842.98	Joback Method
cpg	798.88	J/mol×K	874.04	Joback Method
cpg	811.66	J/mol×K	905.10	Joback Method
cpg	823.68	J/mol×K	936.16	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=U360816&Units=SI

Legend

cpg:	Ideal gas heat capacity
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