Glutaric acid, diamide, N,N'-dibutyl-N,N'-diphenyl-

Inchi: InChI=1S/C25H34N2O2/c1-3-5-20-26(22-14-9-7-10-15-22)24(28)18-13-19-25(29)27(21-6

InchiKey: FZKJCHZUFTZIAX-UHFFFAOYSA-N

Formula: C25H34N2O2

SMILES: CCCCN(C(=O)CCCC(=O)N(CCCC)c1ccccc1)c1ccccc1

Mol. weight [g/mol]: 394.55

Physical Properties

Property code	Value	Unit	Source
gf	348.16	kJ/mol	Joback Method
hf	-176.37	kJ/mol	Joback Method
hfus	57.83	kJ/mol	Joback Method
hvap	93.37	kJ/mol	Joback Method
log10ws	-6.25		Crippen Method
logp	5.823		Crippen Method
mcvol	338.690	ml/mol	McGowan Method
pc	1245.09	kPa	Joback Method
rinpol	3038.00		NIST Webbook
rinpol	3038.00		NIST Webbook
tb	957.38	K	Joback Method
tc	1177.97	K	Joback Method
tf	589.15	K	Joback Method
vc	1.268	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	1107.39	J/mol×K	957.38	Joback Method
cpg	1123.66	J/mol×K	994.15	Joback Method
cpg	1138.82	J/mol×K	1030.91	Joback Method
cpg	1152.99	J/mol×K	1067.68	Joback Method
cpg	1166.27	J/mol×K	1104.44	Joback Method
cpg	1178.80	J/mol×K	1141.21	Joback Method
cpg	1190.69	J/mol×K	1177.97	Joback Method

Sources

McGowan Method:	http://link.springer.com/article/10.1007/BF02311772
NIST Webbook:	http://webbook.nist.gov/cgi/cbook.cgi?ID=U360186&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
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