2,6-Piperidinedione, 3-phenyl-

Other names: Glutarimide, 2-phenyl-
«alpha»-Phenylglutarimide
2-Phenylglutarimide
Inchi: InChI=1S/C11H11NO2/c13-10-7-6-9(11(14)12-10)8-4-2-1-3-5-8/h1-5,9H,6-7H2,(H,12,13,
InchiKey: KAKZYGLQCHMNGS-UHFFFAOYSA-N
Formula: C11H11NO2
SMILES: O=C1CCC(c2ccccc2)C(=O)N1
Mol. weight [g/mol]: 189.21
CAS: 14149-34-9

Physical Properties

Property code	Value	Unit	Source
gf	21.13	kJ/mol	Joback Method
hf	-217.11	kJ/mol	Joback Method
hfus	18.73	kJ/mol	Joback Method
hvap	58.04	kJ/mol	Joback Method
log10ws	-2.13		Crippen Method
logp	1.207		Crippen Method
mcvol	144.350	ml/mol	McGowan Method
pc	3704.46	kPa	Joback Method
rinpol	1782.00		NIST Webbook
tb	681.50	K	Joback Method
tc	958.44	K	Joback Method
tf	489.00	K	Joback Method
vc	0.527	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	391.70	J/mol×K	681.50	Joback Method
cpg	409.80	J/mol×K	727.66	Joback Method
cpg	426.34	J/mol×K	773.81	Joback Method
cpg	441.27	J/mol×K	819.97	Joback Method
cpg	454.51	J/mol×K	866.13	Joback Method

cpg	466.02	J/mol×K	912.28	Joback Method
cpg	475.72	J/mol×K	958.44	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=C14149349&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
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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