

2,6-Piperidinedione, 3-(1-hydroxyethyl)-3-phenyl-

Other names: 2-(1-Hydroxyethyl)-2-phenylglutarimide

Glutethimide M (OH-ethyl)

Inchi: InChI=1S/C13H15NO3/c1-9(15)13(10-5-3-2-4-6-10)8-7-11(16)14-12(13)17/h2-6,9,15H,7

InchiKey: XHMCNOHNFNMYFS-UHFFFAOYSA-N

Formula: C13H15NO3

SMILES: CC(O)C1(c2ccccc2)CCC(=O)NC1=O

Mol. weight [g/mol]: 233.26

CAS: 50275-57-5

Physical Properties

Property code	Value	Unit	Source
gf	-106.78	kJ/mol	Joback Method
hf	-400.66	kJ/mol	Joback Method
hfus	18.18	kJ/mol	Joback Method
hvap	77.63	kJ/mol	Joback Method
log10ws	-2.05		Crippen Method
logp	0.742		Crippen Method
mcvol	178.400	ml/mol	McGowan Method
pc	3501.28	kPa	Joback Method
rinpola	2060.00		NIST Webbook
tb	819.24	K	Joback Method
tc	1071.53	K	Joback Method
tf	581.26	K	Joback Method
vc	0.650	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	549.36	J/molxK	819.24	Joback Method
cpg	565.26	J/molxK	861.29	Joback Method
cpg	580.36	J/molxK	903.34	Joback Method
cpg	594.76	J/molxK	945.39	Joback Method
cpg	608.56	J/molxK	987.44	Joback Method
cpg	621.86	J/molxK	1029.49	Joback Method

Sources

McGowan Method:	http://link.springer.com/article/10.1007/BF02311772
NIST Webbook:	http://webbook.nist.gov/cgi/cbook.cgi?ID=C50275575&Units=SI
Crippen Method:	http://pubs.acs.org/doi/abs/10.1021/ci990307I
Crippen Method:	https://www.cheméo.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

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