N-(2,6-Dioxo-piperidin-3-yl)-2-phenyl-acetamide

Inchi: InChI=1S/C13H14N2O3/c16-11-7-6-10(13(18)15-11)14-12(17)8-9-4-2-1-3-5-9/h1-5,10H,
InchiKey: OQGRFQCUGLKSAV-UHFFFAOYSA-N
Formula: C13H14N2O3
SMILES: O=C1CCC(NC(=O)Cc2ccccc2)C(=O)N1
Mol. weight [g/mol]: 246.26

Physical Properties

Property code	Value	Unit	Source
gf	-1.56	kJ/mol	Joback Method
hf	-317.50	kJ/mol	Joback Method
hfus	30.61	kJ/mol	Joback Method
hvap	75.67	kJ/mol	Joback Method
log10ws	-2.08		Crippen Method
logp	0.151		Crippen Method
mcvol	184.080	ml/mol	McGowan Method
pc	3231.98	kPa	Joback Method
rinpol	2275.00		NIST Webbook
rinpol	2275.00		NIST Webbook
tb	831.30	K	Joback Method
tc	1094.13	K	Joback Method
tf	614.13	K	Joback Method
vc	0.680	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	565.68	J/mol×K	831.30	Joback Method
cpg	580.38	J/mol×K	875.11	Joback Method
cpg	593.22	J/mol×K	918.91	Joback Method
cpg	604.16	J/mol×K	962.72	Joback Method
cpg	613.17	J/mol×K	1006.52	Joback Method
cpg	620.20	J/mol×K	1050.33	Joback Method
cpg	625.21	J/mol×K	1094.13	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=R247993&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