N,N'-dibutyloxalamide

Other names:	N,N'-dibutylethanediamide
	N,N'-dibutyloxamide
Inchi:	InChI=1S/C10H20N2O2/c1-3-5-7-11-9(13)10(14)12-8-6-4-2/h3-8H2,1-2H3,(H,11,13)(H,1
InchiKey:	YUUVWMFUVGZOHK-UHFFFAOYSA-N
Formula:	C10H20N2O2
SMILES:	CCCCNC(=O)C(=O)NCCCC
Mol. weight [g/mol]:	200.28

Physical Properties

Property code	Value	Unit	Source
af	0.7522		Cheméo Relay (1.0)
hf	-466.71	kJ/mol	Cheméo Relay (1.0)
hfus	35.05	kJ/mol	Joback Method
hvap	77.54	kJ/mol	Cheméo Relay (1.0)
ie	8.98	eV	Cheméo Relay (1.0)
log10ws	-2.56		Cheméo Relay (1.0)
logp	0.819		Crippen Method
mcvol	174.860	ml/mol	McGowan Method
pc	2436.25	kPa	Joback Method
tb	536.17	K	Cheméo Relay (1.0)
tc	748.52	K	Cheméo Relay (1.0)
tf	332.54	K	Cheméo Relay (1.0)

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	468.05	J/mol×K	636.28	Joback Method
cpg	481.50	J/mol×K	667.17	Joback Method
cpg	494.26	J/mol×K	698.06	Joback Method
cpg	506.36	J/mol×K	728.96	Joback Method
cpg	517.82	J/mol×K	759.85	Joback Method
cpg	528.65	J/mol×K	790.74	Joback Method
cpg	538.87	J/mol×K	821.63	Joback Method

Sources

Crippen Method:	https://www.chemeo.com/doc/models/crippen_log10ws
Cheméo Relay (1.0):	
Cheméo Relay (1.0, beta):	
Solubilities and partial molar volumes of N,N0-dibutyl-oxalamide, N,N0-dihexyl-oxalamide, N,N0-dioctyl-oxalamide in supercritical carbon dioxide:	https://www.doi.org/10.1016/j.jct.2012.05.014
Joback Method:	https://en.wikipedia.org/wiki/Joback_method
McGowan Method:	http://link.springer.com/article/10.1007/BF02311772
Crippen Method:	http://pubs.acs.org/doi/abs/10.1021/ci990307l

Legend

af:	Acentric Factor
cpg:	Ideal gas heat capacity
hf:	Enthalpy of formation at standard conditions
hfus:	Enthalpy of fusion at standard conditions
hvap:	Enthalpy of vaporization at standard conditions
ie:	Ionization energy
log10ws:	Log10 of Water solubility in mol/l
logp:	Octanol/Water partition coefficient
mcvol:	McGowan's characteristic volume
pc:	Critical Pressure
tb:	Normal Boiling Point Temperature
tc:	Critical Temperature
tf:	Normal melting (fusion) point