N,N'-DIACETYLHEXAMETHYLENEDIAMINE

Other names:	Acetamide, N,N'-1,6-hexanediylbis-
	Acetamide, N,N'-hexamethylenebis-
	HMBA
	Hexamethylene bisacetamide
	Hexamethylenediacetamide
	N,N'-(hexane-1,6-diyl)diacetamide
	N,N'-diacetyl-1,6-hexanediamine
	N,N'-hexamethylenebisacetamide
	N-[6-(Acetylamino)hexyl]acetamide
	NSC 95580
Inchi:	InChI=1S/C10H20N2O2/c1-9(13)11-7-5-3-4-6-8-12-10(2)14/h3-8H2,1-2H3,(H,11,13)(H,1
InchiKey:	BNQSTAOJRULKNX-UHFFFAOYSA-N
Formula:	C10H20N2O2
SMILES:	CC(=O)NCCCCCCNC(C)=O
Mol. weight [g/mol]:	200.28

Physical Properties

Property code	Value	Unit	Source
hf	-548.29	kJ/mol	Cheméo Relay (1.0)
hfus	35.05	kJ/mol	Joback Method
hvap	90.14	kJ/mol	Cheméo Relay (1.0)
ie	8.76	eV	Cheméo Relay (1.0)
logp	0.819		Crippen Method
mcvol	174.860	ml/mol	McGowan Method
tb	552.74	K	Cheméo Relay (1.0)
tf	364.58	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

Volumetric Properties and Refractive Indices of N,N′-Hexamethylenebisacetamide in Aqueous Glucose and Sucrose Solutions:	https://www.doi.org/10.1021/je200421s
Joback Method:	https://en.wikipedia.org/wiki/Joback_method
Chemeo Relay (1.0):	
Enthalpies of Dilution, Volumetric Properties, and Refractive Indices of N,N′-Hexamethylenebisacetamide in Aqueous Xylitol or d-Mannitol Solutions at T = 298.15 K :	https://www.doi.org/10.1021/je300633e
NIST Webbook:	http://webbook.nist.gov/cgi/cbook.cgi?ID=C3073594&Units=SI
McGowan Method:	http://link.springer.com/article/10.1007/BF02311772
Crippen Method:	http://pubs.acs.org/doi/abs/10.1021/ci990307l
Enthalpies of dilution and volumetric properties of N,N′-hexamethylenebisacetamide in aqueous solutions of sodium chloride at 298.15 K:	https://www.doi.org/10.1016/j.jct.2010.04.004
Crippen Method:	https://www.chemeo.com/doc/models/crippen_log10ws
Chemeo Relay (1.0, beta):	

Legend

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
logp:	Octanol/Water partition coefficient
mcvol:	McGowan's characteristic volume
tb:	Normal Boiling Point Temperature
tf:	Normal melting (fusion) point