N,N'-METHYLENEBIS(LAURAMIDE)

Other names: N,N'-Methylenebis-n-dodecanamide
Inchi: InChI=1S/C25H50N2O2/c1-3-5-7-9-11-13-15-17-19-21-24(28)26-23-27-25(29)22-20-18-1
InchiKey: ZZJXLPCLJWLLIZ-UHFFFAOYSA-N
Formula: C25H50N2O2
SMILES: CCCCCCCCCCCC(=O)NCNC(=O)CCCCCCCCCCC
Mol. weight [g/mol]: 410.69

Physical Properties

Property code	Value	Unit	Source
af	1.2458		Cheméo Relay (1.0)
hf	-826.12	kJ/mol	Cheméo Relay (1.0)
hfus	73.90	kJ/mol	Joback Method
hvap	140.93	kJ/mol	Cheméo Relay (1.0)
ie	9.32	eV	Cheméo Relay (1.0)
log10ws	-6.86		Cheméo Relay (1.0)
logp	7.018		Crippen Method
mcvol	386.210	ml/mol	McGowan Method
pc	832.42	kPa	Joback Method
tb	654.95	K	Cheméo Relay (1.0)
tc	886.23	K	Cheméo Relay (1.0)
tf	385.28	K	Cheméo Relay (1.0)

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	1349.39	J/mol×K	979.48	Joback Method
cpg	1370.44	J/mol×K	1017.58	Joback Method
cpg	1390.00	J/mol×K	1055.67	Joback Method
cpg	1408.17	J/mol×K	1093.77	Joback Method
cpg	1425.04	J/mol×K	1131.87	Joback Method
cpg	1440.71	J/mol×K	1169.97	Joback Method
cpg	1455.28	J/mol×K	1208.06	Joback Method

Sources

Crippen Method:	https://www.chemeo.com/doc/models/crippen_log10ws
Cheméo Relay (1.0):	
Cheméo Relay (1.0, beta):	
NIST Webbook:	http://webbook.nist.gov/cgi/cbook.cgi?ID=C5136458&Units=SI
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