di-n-Undecylamine

Other names: n.-Undecylamine, N-(n.-undecyl)-
Inchi: InChI=1S/C22H47N/c1-3-5-7-9-11-13-15-17-19-21-23-22-20-18-16-14-12-10-8-6-4-2/h23
InchiKey: NKGSHSILLGXYDW-UHFFFAOYSA-N
Formula: C22H47N
SMILES: CCCCCCCCCCCNCCCCCCCCCCC
Mol. weight [g/mol]: 325.62
CAS: 16165-33-6

Physical Properties

Property code	Value	Unit	Source
gf	223.75	kJ/mol	Joback Method
hf	-443.94	kJ/mol	Joback Method
hfus	57.84	kJ/mol	Joback Method
hvap	71.00	kJ/mol	Joback Method
log10ws	-8.22		Crippen Method
logp	7.638		Crippen Method
mcvol	330.820	ml/mol	McGowan Method
pc	908.89	kPa	Joback Method
tb	752.93	K	Joback Method
tc	924.28	K	Joback Method
tf	325.15 ± 1.00	K	NIST Webbook
vc	1.302	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	1034.49	J/mol×K	752.93	Joback Method
cpg	1056.10	J/mol×K	781.49	Joback Method
cpg	1076.71	J/mol×K	810.05	Joback Method
cpg	1096.37	J/mol×K	838.60	Joback Method
cpg	1115.11	J/mol×K	867.16	Joback Method
cpg	1132.96	J/mol×K	895.72	Joback Method
cpg	1149.96	J/mol×K	924.28	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=C16165336&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
tb:	Normal Boiling Point Temperature
tc:	Critical Temperature
tf:	Normal melting (fusion) point
vc:	Critical Volume

Latest version available from:
https://www.chemeo.com/cid/77-439-0/di-n-Undecylamine.pdf
Generated by Cheméo on 2024-04-26 21:14:31.38690371 +0000 UTC m=+16455320.307481025.
Cheméo (https://www.chemeo.com) is the biggest free database of chemical and physical data for the process industry.