2-Propanamine, N-methyl-N-(1-methylethyl)-

Other names: Diethylamine, N,1,1'-trimethyl-
Diisopropylmethylamine
Methyldiisopropylamine
N-Methyldiisopropylamine
Inchi: InChI=1S/C7H17N/c1-6(2)8(5)7(3)4/h6-7H,1-5H3
InchiKey: ISRXMEYARGEVIU-UHFFFAOYSA-N
Formula: C7H17N
SMILES: CC(C)N(C)C(C)C
Mol. weight [g/mol]: 115.22
CAS: 10342-97-9

Physical Properties

Property code	Value	Unit	Source
gf	113.96	kJ/mol	Joback Method
hf	-130.84	kJ/mol	Joback Method
hfus	9.86	kJ/mol	Joback Method
hvap	32.44	kJ/mol	Joback Method
log10ws	-1.55		Crippen Method
logp	1.735		Crippen Method
mcvol	119.470	ml/mol	McGowan Method
pc	2841.41	kPa	Joback Method
rinpol	749.00		NIST Webbook
rinpol	749.00		NIST Webbook
tb	371.12	K	Joback Method
tc	541.35	K	Joback Method
tf	171.12	K	Joback Method
vc	0.433	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	221.06	J/mol×K	371.12	Joback Method
cpg	234.85	J/mol×K	399.49	Joback Method
cpg	248.09	J/mol×K	427.86	Joback Method

cpg	260.78	J/mol×K	456.24	Joback Method
cpg	272.95	J/mol×K	484.61	Joback Method
cpg	284.60	J/mol×K	512.98	Joback Method
cpg	295.76	J/mol×K	541.35	Joback Method

Correlations

Information	Value
Property code	pvap
Equation	ln(Pvp) = A + B/(T + C)
Coeff. A	1.52439e+01
Coeff. B	-3.61791e+03
Coeff. C	-4.82220e+01
Temperature range (K), min.	290.12
Temperature range (K), max.	412.47

Sources

The Yaws Handbook of Vapor Pressure:	https://www.sciencedirect.com/book/9780128029992/the-yaws-handbook-of-vapor-pressure
Crippen Method:	http://pubs.acs.org/doi/abs/10.1021/ci990307l
Crippen Method:	https://www.chemeo.com/doc/models/crippen_log10ws
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=C10342979&Units=SI

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
pvap:	Vapor pressure
rinpol:	Non-polar retention indices
tb:	Normal Boiling Point Temperature
tc:	Critical Temperature
tf:	Normal melting (fusion) point
vc:	Critical Volume