Hydrazine, 1,2-bis(1-methylethyl)-

Other names:	1,2-Diisopropylhydrazine Hydrazine, 1,2-diisopropyl- N,N'-Diisopropylhydrazine
Inchi:	InChI=1S/C6H16N2/c1-5(2)7-8-6(3)4/h5-8H,1-4H3
InchiKey:	QWLQTDXXEZQUBB-UHFFFAOYSA-N
Formula:	C6H16N2
SMILES:	CC(C)NNC(C)C
Mol. weight [g/mol]:	116.20
CAS:	3711-34-0

Physical Properties

Property code	Value	Unit	Source
gf	173.54	kJ/mol	Joback Method
hf	-70.79	kJ/mol	Joback Method
hfus	14.45	kJ/mol	Joback Method
hvap	41.05	kJ/mol	Joback Method
ie	8.45	eV	NIST Webbook
ie	8.34	eV	NIST Webbook
ie	8.59	eV	NIST Webbook
log10ws	-1.93		Crippen Method
logp	0.897		Crippen Method
mcvol	115.360	ml/mol	McGowan Method
pc	3257.86	kPa	Joback Method
rinpol	803.00		NIST Webbook
rinpol	803.00		NIST Webbook
tb	398.20	K	NIST Webbook
tc	618.59	K	Joback Method
tf	232.70	K	Joback Method
vc	0.429	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	242.94	J/mol×K	436.14	Joback Method

cpg	255.73	J/mol×K	466.55	Joback Method
cpg	267.97	J/mol×K	496.96	Joback Method
cpg	279.68	J/mol×K	527.37	Joback Method
cpg	290.88	J/mol×K	557.78	Joback Method
cpg	301.57	J/mol×K	588.19	Joback Method
cpg	311.77	J/mol×K	618.59	Joback Method

Correlations

Information	Value
Property code	pvap
Equation	ln(Pvp) = A + B/(T + C)
Coeff. A	1.56440e+01
Coeff. B	-3.81889e+03
Coeff. C	-5.18360e+01
Temperature range (K), min.	300.52
Temperature range (K), max.	421.44

Sources

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=C3711340&Units=SI
The Yaws Handbook of Vapor Pressure:	https://www.sciencedirect.com/book/9780128029992/the-yaws-handbook-of-vapor-pressure

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
ie:	Ionization energy

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

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