

Hydrazine, (phenylmethyl)-

Other names:	Hydrazine, benzyl- Benzylhydrazine Benzyl hydrazide (Phenylmethyl)hydrazine
Inchi:	InChI=1S/C7H10N2/c8-9-6-7-4-2-1-3-5-7/h1-5,9H,6,8H2
InchiKey:	NHOWLEZFTHYCTP-UHFFFAOYSA-N
Formula:	C7H10N2
SMILES:	NNCc1ccccc1
Mol. weight [g/mol]:	122.17
CAS:	555-96-4

Physical Properties

Property code	Value	Unit	Source
gf	276.31	kJ/mol	Joback Method
hf	135.98	kJ/mol	Joback Method
hfus	18.22	kJ/mol	Joback Method
hvap	50.53	kJ/mol	Joback Method
ie	8.64	eV	NIST Webbook
log10ws	-1.96		Crippen Method
logp	0.650		Crippen Method
mcvol	105.690	ml/mol	McGowan Method
pc	4510.35	kPa	Joback Method
rinpol	1118.00		NIST Webbook
rinpol	1118.00		NIST Webbook
tb	508.94	K	Joback Method
tc	736.38	K	Joback Method
tf	330.99	K	Joback Method
vc	0.384	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	229.73	J/mol×K	508.94	Joback Method
cpg	241.88	J/mol×K	546.85	Joback Method

cpg	253.22	J/mol×K	584.75	Joback Method
cpg	263.77	J/mol×K	622.66	Joback Method
cpg	273.59	J/mol×K	660.57	Joback Method
cpg	282.70	J/mol×K	698.47	Joback Method
cpg	291.15	J/mol×K	736.38	Joback Method

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=C555964&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
ie:	Ionization energy
log10ws:	Log10 of Water solubility in mol/l
logp:	Octanol/Water partition coefficient
mcvol:	McGowan's characteristic volume
pc:	Critical 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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