Methamphetamine

Other names:	Benzeneethanamine, N,«alpha»-dimethyl-, (S)-
	Phenethylamine, N,«alpha»-dimethyl-, (S)-(+)-
	(+)-(S)-Deoxyephedrine
	(+)-Methamphetamine
	(+)-Methylamphetamine
	(+)-N-Methylamphetamine
	D-(S)-methamphetamine
	D-deoxyephedrine
	D-desoxyephedrine
	D-methamphetamine
	D-methylamphetamine
	D-N-methylamphetamine
	D-N,«alpha»-dimethylphenethylamine
	D-phenylisopropylmethylamine
	Benzeneethanamine, N,«alpha»-dimethyl-, (+)-
	L-Methamphetamine
	Metamphetamine
	Methyl-«beta»-phenylisopropylamine
	Methylamphetamine
	N-Methylamphetamine
	Norodin
	1-Phenyl-2-methylaminopropane
	D-1-Phenyl-2-methylaminopropan
	D-1-Phenyl-2-methylaminopropane
	Phenethylamine, N,«alpha»-dimethyl-, (+)-
	Metamfetamine
	(+)-N,«alpha»-Dimethylphenethylamine
	Desyphed
	(+)-(S)-N-«alpha»-Dimethylphenethylamine
	(+)-2-(N-Methylamino)-1-phenylpropane
	(+)-N,«alpha»-Dimethyl-«beta»-phenylethylamine
	(S)-(+)-Deoxyephedrine
	(S)-Methamphetamine
	(S)-Methylamphetamine
	NSC 25115
	N-«alpha»-dimethylphenethylamine
Inchi:	InChI=1S/C10H15N/c1-9(11-2)8-10-6-4-3-5-7-10/h3-7,9,11H,8H2,1-2H3/t9-/m1/s1
InchiKey:	MYWUZJCMWCOHBA-SECBINFHSA-N
Formula:	C10H15N
SMILES:	CNC(C)Cc1ccccc1

Mol. weight [g/mol]: 149.23
CAS: 537-46-2

Physical Properties

Property code	Value	Unit	Source
gf	232.68	kJ/mol	Joback Method
hf	34.99	kJ/mol	Joback Method
hfus	17.27	kJ/mol	Joback Method
hvap	46.18	kJ/mol	Joback Method
log10ws	-2.41		Crippen Method
logp	1.837		Crippen Method
mcvol	137.980	ml/mol	McGowan Method
pc	2999.15	kPa	Joback Method
rinpol	1161.00		NIST Webbook
rinpol	1187.00		NIST Webbook
rinpol	1187.00		NIST Webbook
rinpol	1188.00		NIST Webbook
ripol	1562.00		NIST Webbook
ripol	1562.00		NIST Webbook
tb	504.61	K	Joback Method
tc	715.64	K	Joback Method
tf	266.54	K	Joback Method
vc	0.516	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	304.75	J/mol×K	504.61	Joback Method
cpg	320.38	J/mol×K	539.78	Joback Method
cpg	335.09	J/mol×K	574.95	Joback Method
cpg	348.92	J/mol×K	610.13	Joback Method
cpg	361.90	J/mol×K	645.30	Joback Method
cpg	374.08	J/mol×K	680.47	Joback Method
cpg	385.49	J/mol×K	715.64	Joback Method
hvapt	52.80	kJ/mol	287.00	NIST Webbook

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=C537462&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
hvapt:	Enthalpy of vaporization at a given temperature
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
ripol:	Polar retention indices
tb:	Normal Boiling Point Temperature
tc:	Critical Temperature
tf:	Normal melting (fusion) point
vc:	Critical Volume