N,N,2,4-Tetramethylbenzenamine

Other names: N,N-Dimethyl-2,4-xylidine
Inchi: InChI=1S/C10H15N/c1-8-5-6-10(11(3)4)9(2)7-8/h5-7H,1-4H3
InchiKey: DZXAIYQRCQALGE-UHFFFAOYSA-N
Formula: C10H15N
SMILES: Cc1ccc(N(C)C)c(C)c1
Mol. weight [g/mol]: 149.23
CAS: 769-53-9

Physical Properties

Property code	Value	Unit	Source
gf	237.25	kJ/mol	Joback Method
hf	31.39	kJ/mol	Joback Method
hfus	17.94	kJ/mol	Joback Method
hvap	43.50	kJ/mol	Joback Method
ie	7.17	eV	NIST Webbook
ie	7.79	eV	NIST Webbook
log10ws	-2.33		Crippen Method
logp	2.369		Crippen Method
mcvol	137.980	ml/mol	McGowan Method
pc	2832.35	kPa	Joback Method
rinpol	1149.60		NIST Webbook
rinpol	1149.60		NIST Webbook
ripol	1798.10		NIST Webbook
tb	477.28	K	Joback Method
tc	681.78	K	Joback Method
tf	286.39	K	Joback Method
vc	0.505	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	290.18	J/mol×K	477.28	Joback Method
cpg	305.33	J/mol×K	511.36	Joback Method
cpg	319.69	J/mol×K	545.45	Joback Method

cpg	333.27	J/mol×K	579.53	Joback Method
cpg	346.11	J/mol×K	613.61	Joback Method
cpg	358.24	J/mol×K	647.70	Joback Method
cpg	369.68	J/mol×K	681.78	Joback Method

Sources

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=C769539&Units=SI
Crippen Method:	http://pubs.acs.org/doi/abs/10.1021/ci990307l

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
ripol:	Polar retention indices
tb:	Normal Boiling Point Temperature
tc:	Critical Temperature
tf:	Normal melting (fusion) point
vc:	Critical Volume