Benzenemethanamine, N,«alpha»,«alpha»-triphenyl-

Other names: Methylamine, N,1,1,1-tetraphenyl-
Benzenamine, N-(triphenylmethyl)-
Phenyltriphenylmethylamine
N-Tritylaniline
N-(Triphenylmethyl)aniline

Inchi: InChI=1S/C25H21N/c1-5-13-21(14-6-1)25(22-15-7-2-8-16-22,23-17-9-3-10-18-23)26-24-

InchiKey: RFGSRKHZQYWJJW-UHFFFAOYSA-N

Formula: C25H21N

SMILES: c1ccc(NC(c2ccccc2)(c2ccccc2)c2ccccc2)cc1

Mol. weight [g/mol]: 335.44

CAS: 4471-22-1

Physical Properties

Property code	Value	Unit	Source
gf	701.49	kJ/mol	Joback Method
hf	431.51	kJ/mol	Joback Method
hfus	34.35	kJ/mol	Joback Method
hvap	85.49	kJ/mol	Joback Method
log10ws	-6.70		Crippen Method
logp	6.091		Crippen Method
mcvol	278.050	ml/mol	McGowan Method
pc	1954.41	kPa	Joback Method
tb	925.06	K	Joback Method
tc	1207.44	K	Joback Method
tf	532.27	K	Joback Method
vc	1.028	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	848.08	J/mol×K	925.06	Joback Method
cpg	864.37	J/mol×K	972.12	Joback Method
cpg	879.30	J/mol×K	1019.19	Joback Method
cpg	893.15	J/mol×K	1066.25	Joback Method

cpg	906.22	J/mol×K	1113.31	Joback Method
cpg	918.81	J/mol×K	1160.37	Joback Method
cpg	931.21	J/mol×K	1207.44	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=C4471221&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
log10ws:	Log10 of Water solubility in mol/l
logp:	Octanol/Water partition coefficient
mcvol:	McGowan's characteristic volume
pc:	Critical Pressure
tb:	Normal Boiling Point Temperature
tc:	Critical Temperature
tf:	Normal melting (fusion) point
vc:	Critical Volume