

4-Tritylaniline

Other names:

p-Tritylaniline
p-Aminotetraphenylmethane
p-(Triphenylmethyl)aniline
4-(Triphenylmethyl)aniline
Benzenamine, 4-(triphenylmethyl)-
p-Toluidine, «alpha», «alpha», «alpha»-triphenyl-
Triphenyl(p-aminophenyl)methane
4-Aminotetraphenylmethane
4-(Triphenylmethyl)benzenamine
NSC 2085

Inchi:

InChI=1S/C25H21N/c26-24-18-16-23(17-19-24)25(20-10-4-1-5-11-20,21-12-6-2-7-13-21)

InchiKey:

XYHDHXBLSLSXSR-UHFFFAOYSA-N

Formula:

C₂₅H₂₁N

SMILES:

Nc1ccc(C(c2ccccc2)(c2ccccc2)c2ccccc2)cc1

Mol. weight [g/mol]:

335.44

CAS:

22948-06-7

Physical Properties

Property code	Value	Unit	Source
gf	668.92	kJ/mol	Joback Method
hf	400.36	kJ/mol	Joback Method
hfus	34.06	kJ/mol	Joback Method
hvap	90.36	kJ/mol	Joback Method
log10ws	-6.31		Crippen Method
logp	5.652		Crippen Method
mcvol	278.050	ml/mol	McGowan Method
pc	2005.50	kPa	Joback Method
tb	952.40	K	Joback Method
tc	1242.47	K	Joback Method
tf	575.39	K	Joback Method
vc	1.022	m ³ /kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	853.89	J/mol×K	952.40	Joback Method
cpg	869.63	J/mol×K	1000.74	Joback Method
cpg	884.12	J/mol×K	1049.09	Joback Method
cpg	897.64	J/mol×K	1097.43	Joback Method
cpg	910.52	J/mol×K	1145.78	Joback Method
cpg	923.04	J/mol×K	1194.12	Joback Method
cpg	935.52	J/mol×K	1242.47	Joback Method

Sources

NIST Webbook:	http://webbook.nist.gov/cgi/cbook.cgi?ID=C22948067&Units=SI
Crippen Method:	http://pubs.acs.org/doi/abs/10.1021/ci9903071
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

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

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