Diampromide

Other names: Propanamide, N-[2-[methyl(2-phenylethyl)amino]propyl]-N-phenyl-
Propionanilide, N-[2-(methylphenethylamino)propyl]-
Diampromid
N-[2-(Methylphenethylamino)propyl]propionanilide
Inchi: InChI=1S/C21H28N2O/c1-4-21(24)23(20-13-9-6-10-14-20)17-18(2)22(3)16-15-19-11-7-5
InchiKey: RXTHKWVSXOIHJS-UHFFFAOYSA-N
Formula: C21H28N2O
SMILES: CCC(=O)N(CC(C)N(C)CCc1ccccc1)c1ccccc1
Mol. weight [g/mol]: 324.46
CAS: 552-25-0

Physical Properties

Property code	Value	Unit	Source
gf	440.96	kJ/mol	Joback Method
hf	13.49	kJ/mol	Joback Method
hfus	42.35	kJ/mol	Joback Method
hvap	77.34	kJ/mol	Joback Method
log10ws	-4.38		Crippen Method
logp	3.993		Crippen Method
mcvol	280.760	ml/mol	McGowan Method
pc	1593.62	kPa	Joback Method
tb	811.55	K	Joback Method
tc	1028.17	K	Joback Method
tf	479.14	K	Joback Method
vc	1.032	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	851.35	J/mol×K	811.55	Joback Method
cpg	869.13	J/mol×K	847.65	Joback Method
cpg	885.63	J/mol×K	883.76	Joback Method
cpg	900.96	J/mol×K	919.86	Joback Method
cpg	915.22	J/mol×K	955.96	Joback Method

cpg	928.50	J/mol×K	992.06	Joback Method
cpg	940.92	J/mol×K	1028.17	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=C552250&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