2-Methylbenzene-1,4-diamine, N1,N1,N4,N4-tetrakis(pentafluoropropionyl)-

Other names: 2,5-Bis-di-pentafluoropropionylaminotoluene

Inchi: InChI=1S/C19H6F20N2O4/c1-5-4-6(40(8(42)12(20,21)16(28,29)30)9(43)13(22,23)17(31

InchiKey: ORJZUETUVQYPGG-UHFFFAOYSA-N

Formula: C19H6F20N2O4

SMILES: Cc1cc(N(C(=O)C(F)(F)C(F)(F)F)C(=O)C(F)(F)C(F)(F)F)ccc1N(C(=O)C(F)(F)C(F)(F)F)C(=

Mol. weight [g/mol]: 706.23

Physical Properties

Property code	Value	Unit	Source
gf	-3965.35	kJ/mol	Joback Method
hf	-4529.36	kJ/mol	Joback Method
hfus	52.95	kJ/mol	Joback Method
hvap	65.85	kJ/mol	Joback Method
log10ws	-8.12		Crippen Method
logp	6.505		Crippen Method
mcvol	316.450	ml/mol	McGowan Method
pc	952.01	kPa	Joback Method
rinpol	1205.00		NIST Webbook
tb	870.68	K	Joback Method
tc	1070.75	K	Joback Method
tf	651.17	K	Joback Method
vc	1.323	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	1029.76	J/mol×K	870.68	Joback Method
cpg	1038.32	J/mol×K	904.03	Joback Method
cpg	1046.26	J/mol×K	937.37	Joback Method
cpg	1053.80	J/mol×K	970.72	Joback Method
cpg	1061.13	J/mol×K	1004.06	Joback Method
cpg	1068.47	J/mol×K	1037.41	Joback Method
cpg	1076.01	J/mol×K	1070.75	Joback Method

Sources

NIST Webbook:	http://webbook.nist.gov/cgi/cbook.cgi?ID=U373219&Units=SI
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

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
rinpol:	Non-polar retention indices
tb:	Normal Boiling Point Temperature
tc:	Critical Temperature
tf:	Normal melting (fusion) point
vc:	Critical Volume