

L-Phenylalanine, n-heptafluorobutyryl-, hexyl ester

Inchi:	InChI=1S/C19H22F7NO3/c1-2-3-4-8-11-30-15(28)14(12-13-9-6-5-7-10-13)27-16(29)17(2
InchiKey:	HARPKTKZDXKYIP-UHFFFAOYSA-N
Formula:	C19H22F7NO3
SMILES:	CCCCCOC(=O)C(Cc1ccccc1)NC(=O)C(F)(F)C(F)(F)C(F)(F)F
Mol. weight [g/mol]:	445.37

Physical Properties

Property code	Value	Unit	Source
gf	-1409.53	kJ/mol	Joback Method
hf	-1907.17	kJ/mol	Joback Method
hfus	44.29	kJ/mol	Joback Method
hvap	72.51	kJ/mol	Joback Method
log10ws	-6.11		Crippen Method
logp	4.670		Crippen Method
mvol	286.190	ml/mol	McGowan Method
pc	1240.71	kPa	Joback Method
rinpol	1914.00		NIST Webbook
rinpol	1914.00		NIST Webbook
tb	825.89	K	Joback Method
tc	1016.09	K	Joback Method
tf	501.45	K	Joback Method
vc	1.143	m ³ /kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	905.82	J/molxK	825.89	Joback Method
cpg	919.17	J/molxK	857.59	Joback Method
cpg	931.60	J/molxK	889.29	Joback Method
cpg	943.18	J/molxK	920.99	Joback Method
cpg	953.99	J/molxK	952.69	Joback Method
cpg	964.13	J/molxK	984.39	Joback Method
cpg	973.67	J/molxK	1016.09	Joback Method

Sources

McGowan Method:	http://link.springer.com/article/10.1007/BF02311772
NIST Webbook:	http://webbook.nist.gov/cgi/cbook.cgi?ID=U321112&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

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

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