Benzamide, pentafluoro-N-(pentafluorobenzoyl)-N-tetradecyl-

Inchi: InChI=1S/C28H29F10NO2/c1-2-3-4-5-6-7-8-9-10-11-12-13-14-39(27(40)15-17(29)21(33)

InchiKey: PYEMXIOCVWQGRC-UHFFFAOYSA-N

Formula: C28H29F10NO2

SMILES: CCCCCCCCCCCCCCN(C(=O)c1c(F)c(F)c(F)c(F)c1F)C(=O)c1c(F)c(F)c(F)c(F)c1F

Mol. weight [g/mol]: 601.52

Physical Properties

Property code	Value	Unit	Source
gf	-1781.76	kJ/mol	Joback Method
hf	-2381.62	kJ/mol	Joback Method
hfus	89.49	kJ/mol	Joback Method
hvap	96.46	kJ/mol	Joback Method
log10ws	-12.34		Crippen Method
logp	9.061		Crippen Method
mcvol	388.680	ml/mol	McGowan Method
pc	722.63	kPa	Joback Method
rinpol	2632.00		NIST Webbook
tb	1056.08	K	Joback Method
tc	1330.98	K	Joback Method
tf	721.59	K	Joback Method
vc	1.597	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	1305.87	J/mol×K	1056.08	Joback Method
cpg	1322.06	J/mol×K	1101.90	Joback Method
cpg	1336.27	J/mol×K	1147.71	Joback Method
cpg	1348.62	J/mol×K	1193.53	Joback Method
cpg	1359.21	J/mol×K	1239.35	Joback Method
cpg	1368.17	J/mol×K	1285.17	Joback Method
cpg	1375.61	J/mol×K	1330.98	Joback Method

Sources

NIST Webbook:	http://webbook.nist.gov/cgi/cbook.cgi?ID=U407962&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