Acetamide, n-(2,2,2-trifluoro-1,1-diphenylethyl)-

Inchi: InChI=1S/C16H14F3NO/c1-12(21)20-15(16(17,18)19,13-8-4-2-5-9-13)14-10-6-3-7-11-14

InchiKey: BMTNKSYHPHRYRB-UHFFFAOYSA-N

Formula: C16H14F3NO

SMILES: CC(=O)NC(c1ccccc1)(c1ccccc1)C(F)(F)F

Mol. weight [g/mol]: 293.28

CAS: 1995-76-2

Physical Properties

Property code	Value	Unit	Source
gf	-309.62	kJ/mol	Joback Method
hf	-565.45	kJ/mol	Joback Method
hfus	26.39	kJ/mol	Joback Method
hvap	63.90	kJ/mol	Joback Method
log10ws	-4.62		Crippen Method
logp	3.629		Crippen Method
mcvol	205.640	ml/mol	McGowan Method
pc	2239.76	kPa	Joback Method
tb	714.23	K	Joback Method
tc	942.92	K	Joback Method
tf	432.12	K	Joback Method
vc	0.788	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	574.66	J/mol×K	714.23	Joback Method
cpg	589.18	J/mol×K	752.35	Joback Method
cpg	602.41	J/mol×K	790.46	Joback Method
cpg	614.47	J/mol×K	828.58	Joback Method
cpg	625.50	J/mol×K	866.69	Joback Method
cpg	635.62	J/mol×K	904.81	Joback Method
cpg	644.96	J/mol×K	942.92	Joback Method

Sources

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
NIST Webbook:	http://webbook.nist.gov/cgi/cbook.cgi?ID=C1995762&Units=SI

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