Pentafluoropropanamide, N-(hept-2-yl)-

Inchi: InChI=1S/C10H16F5NO/c1-3-4-5-6-7(2)16-8(17)9(11,12)10(13,14)15/h7H,3-6H2,1-2H3,(
InchiKey: PLEAPXPYTFICLZ-UHFFFAOYSA-N
Formula: C10H16F5NO
SMILES: CCCCCC(C)NC(=O)C(F)(F)C(F)(F)F
Mol. weight [g/mol]: 261.23

Physical Properties

Property code	Value	Unit	Source
gf	-977.02	kJ/mol	Joback Method
hf	-1312.17	kJ/mol	Joback Method
hfus	25.40	kJ/mol	Joback Method
hvap	43.97	kJ/mol	Joback Method
log10ws	-4.06		Crippen Method
logp	3.269		Crippen Method
mcvol	172.160	ml/mol	McGowan Method
pc	1921.98	kPa	Joback Method
rinpol	1071.00		NIST Webbook
rinpol	1071.00		NIST Webbook
tb	521.69	K	Joback Method
tc	681.26	K	Joback Method
tf	297.84	K	Joback Method
vc	0.699	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	441.06	J/mol×K	521.69	Joback Method
cpg	454.68	J/mol×K	548.28	Joback Method
cpg	467.57	J/mol×K	574.88	Joback Method
cpg	479.75	J/mol×K	601.47	Joback Method
cpg	491.27	J/mol×K	628.07	Joback Method
cpg	502.15	J/mol×K	654.66	Joback Method
cpg	512.43	J/mol×K	681.26	Joback Method

Sources

NIST Webbook:	http://webbook.nist.gov/cgi/cbook.cgi?ID=U407334&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