1-Penten-3-yl radical

Inchi: InChI=1S/C5H9/c1-3-5-4-2/h3,5H,1,4H2,2H3
InchiKey: WILKISNQLXFBSQ-UHFFFAOYSA-N
Formula: C5H9
SMILES: C=C[CH]CC
Mol. weight [g/mol]: 69.12
CAS: 17829-37-7

Physical Properties

Property code	Value	Unit	Source
gf	129.00	kJ/mol	Joback Method
hf	29.43	kJ/mol	Joback Method
hfus	5.58	kJ/mol	Joback Method
hvap	25.52	kJ/mol	Joback Method
log10ws	-1.38		Crippen Method
logp	1.787		Crippen Method
mcvol	74.860	ml/mol	McGowan Method
pc	3886.79	kPa	Joback Method
tb	309.34	K	Joback Method
tc	476.20	K	Joback Method
tf	145.72	K	Joback Method
vc	0.281	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	107.96	J/mol×K	309.34	Joback Method
cpg	116.61	J/mol×K	337.15	Joback Method
cpg	124.78	J/mol×K	364.96	Joback Method
cpg	132.50	J/mol×K	392.77	Joback Method
cpg	139.80	J/mol×K	420.58	Joback Method
cpg	146.69	J/mol×K	448.39	Joback Method
cpg	153.19	J/mol×K	476.20	Joback Method
dvisc	0.0005986	Pa×s	145.72	Joback Method
dvisc	0.0004328	Pa×s	172.99	Joback Method

dvisc	0.0003418	Pa×s	200.26	Joback Method
dvisc	0.0002857	Pa×s	227.53	Joback Method
dvisc	0.0002481	Pa×s	254.80	Joback Method
dvisc	0.0002215	Pa×s	282.07	Joback Method
dvisc	0.0002016	Pa×s	309.34	Joback Method

Sources

NIST Webbook:	http://webbook.nist.gov/cgi/cbook.cgi?ID=C17829377&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
dvisc:	Dynamic viscosity
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