

2-Penten-4-yl radical

Inchi:	InChI=1S/C5H9/c1-3-5-4-2/h3-5H,1-2H3
InchiKey:	GSMCDXGKZOUAET-UHFFFAOYSA-N
Formula:	C5H9
SMILES:	C[CH]C=CC
Mol. weight [g/mol]:	69.12
CAS:	51685-67-7

Physical Properties

Property code	Value	Unit	Source
gf	121.38	kJ/mol	Joback Method
hf	21.22	kJ/mol	Joback Method
hfus	7.07	kJ/mol	Joback Method
hvap	26.15	kJ/mol	Joback Method
ie	7.07	eV	NIST Webbook
log10ws	-1.38		Crippen Method
logp	1.787		Crippen Method
mcvol	74.860	ml/mol	McGowan Method
pc	3935.71	kPa	Joback Method
tb	316.82	K	Joback Method
tc	489.69	K	Joback Method
tf	142.40	K	Joback Method
vc	0.281	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	106.66	J/mol×K	316.82	Joback Method
cpg	146.91	J/mol×K	460.88	Joback Method
cpg	139.84	J/mol×K	432.07	Joback Method
cpg	132.31	J/mol×K	403.26	Joback Method
cpg	124.29	J/mol×K	374.44	Joback Method
cpg	115.75	J/mol×K	345.63	Joback Method
cpg	153.54	J/mol×K	489.69	Joback Method
dvisc	0.0001797	Pa×s	316.82	Joback Method

dvisc	0.0002004	Pa×s	287.75	Joback Method
dvisc	0.0002289	Pa×s	258.68	Joback Method
dvisc	0.0002705	Pa×s	229.61	Joback Method
dvisc	0.0003355	Pa×s	200.54	Joback Method
dvisc	0.0004477	Pa×s	171.47	Joback Method
dvisc	0.0006720	Pa×s	142.40	Joback Method

Sources

NIST Webbook:	http://webbook.nist.gov/cgi/cbook.cgi?ID=C51685677&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
ie:	Ionization energy
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

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