

Pent-3-en-1-yl radical

Inchi:

lnchl=1S/C5H9/c1-3-5-4-2/h4-5H,1,3H2,2H3/b5-4+

InchiKey:

NPUZFKMKEFBWLVSNAWJCMRSA-N

Formula:

C5H9

SMILES:

[CH2]CC=CC

Mol. weight [g/mol]:

69.12

CAS:

41182-83-6

Physical Properties

Property code	Value	Unit	Source
gf	123.82	kJ/mol	Joback Method
hf	26.50	kJ/mol	Joback Method
hfus	10.59	kJ/mol	Joback Method
hvap	26.54	kJ/mol	Joback Method
ie	7.65	eV	NIST Webbook
log10ws	-1.38		Crippen Method
logp	1.787		Crippen Method
mcvol	74.860	ml/mol	McGowan Method
pc	3896.50	kPa	Joback Method
tb	317.26	K	Joback Method
tc	485.89	K	Joback Method
tf	157.40	K	Joback Method
vc	0.286	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	106.95	J/mol×K	317.26	Joback Method
cpg	115.71	J/mol×K	345.37	Joback Method
cpg	123.96	J/mol×K	373.47	Joback Method
cpg	131.71	J/mol×K	401.58	Joback Method
cpg	139.01	J/mol×K	429.68	Joback Method
cpg	145.86	J/mol×K	457.79	Joback Method
cpg	152.31	J/mol×K	485.89	Joback Method
dvisc	0.0004809	Pa×s	157.40	Joback Method

dvisc	0.0003638	Pa×s	184.04	Joback Method
dvisc	0.0002954	Pa×s	210.69	Joback Method
dvisc	0.0002513	Pa×s	237.33	Joback Method
dvisc	0.0002209	Pa×s	263.97	Joback Method
dvisc	0.0001988	Pa×s	290.62	Joback Method
dvisc	0.0001821	Pa×s	317.26	Joback Method

Sources

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=C41182836&Units=SI
Crippen Method:	http://pubs.acs.org/doi/abs/10.1021/ci990307l
Crippen Method:	https://www.cheméo.com/doc/models/crippen_log10ws

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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