3-Pentyl

Inchi: InChI=1S/C5H11/c1-3-5-4-2/h5H,3-4H2,1-2H3
InchiKey: KYZMMXQNJXNIFO-UHFFFAOYSA-N
Formula: C5H11
SMILES: CC[CH]CC
Mol. weight [g/mol]: 71.14
CAS: 23443-59-6

Physical Properties

Property code	Value	Unit	Source
gf	41.16	kJ/mol	Joback Method
hf	-96.00	kJ/mol	Joback Method
hfus	6.86	kJ/mol	Joback Method
hvap	26.19	kJ/mol	Joback Method
ie	7.86 ± 0.05	eV	NIST Webbook
log10ws	-1.53		Crippen Method
logp	2.011		Crippen Method
mcvol	79.160	ml/mol	McGowan Method
pc	3690.97	kPa	Joback Method
tb	312.66	K	Joback Method
tc	476.09	K	Joback Method
tf	147.48	K	Joback Method
vc	0.300	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	119.98	J/mol×K	312.66	Joback Method
cpg	129.19	J/mol×K	339.90	Joback Method
cpg	137.97	J/mol×K	367.14	Joback Method
cpg	146.32	J/mol×K	394.37	Joback Method
cpg	154.26	J/mol×K	421.61	Joback Method
cpg	161.81	J/mol×K	448.85	Joback Method
cpg	169.00	J/mol×K	476.09	Joback Method
dvisc	0.0008154	Pa×s	147.48	Joback Method

dvisc	0.0005525	Pa×s	175.01	Joback Method
dvisc	0.0004161	Pa×s	202.54	Joback Method
dvisc	0.0003354	Pa×s	230.07	Joback Method
dvisc	0.0002831	Pa×s	257.60	Joback Method
dvisc	0.0002469	Pa×s	285.13	Joback Method
dvisc	0.0002206	Pa×s	312.66	Joback Method

Sources

NIST Webbook:	http://webbook.nist.gov/cgi/cbook.cgi?ID=C23443596&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