2-Pentyl-tetrahydrofuran

Inchi: InChI=1S/C9H18O/c1-2-3-4-6-9-7-5-8-10-9/h9H,2-8H2,1H3
InchiKey: NXRHOUOTCHJHDB-UHFFFAOYSA-N
Formula: C9H18O
SMILES: CCCCCC1CCCO1
Mol. weight [g/mol]: 142.24

Physical Properties

Property code	Value	Unit	Source
gf	-24.67	kJ/mol	Joback Method
hf	-300.61	kJ/mol	Joback Method
hfus	20.98	kJ/mol	Joback Method
hvap	40.40	kJ/mol	Joback Method
log10ws	-2.68		Crippen Method
logp	2.746		Crippen Method
mcvol	132.680	ml/mol	McGowan Method
pc	2738.28	kPa	Joback Method
rinpol	1081.00		NIST Webbook
tb	447.55	K	Joback Method
tc	638.75	K	Joback Method
tf	228.66	K	Joback Method
vc	0.501	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	288.83	J/mol×K	447.55	Joback Method
cpg	305.79	J/mol×K	479.42	Joback Method
cpg	321.95	J/mol×K	511.28	Joback Method
cpg	337.32	J/mol×K	543.15	Joback Method
cpg	351.93	J/mol×K	575.02	Joback Method
cpg	365.81	J/mol×K	606.89	Joback Method
cpg	378.99	J/mol×K	638.75	Joback Method
dvisc	0.0055765	Pa×s	228.66	Joback Method
dvisc	0.0025572	Pa×s	265.14	Joback Method

dvisc	0.0014161	Pa×s	301.62	Joback Method
dvisc	0.0008908	Pa×s	338.11	Joback Method
dvisc	0.0006133	Pa×s	374.59	Joback Method
dvisc	0.0004512	Pa×s	411.07	Joback Method
dvisc	0.0003490	Pa×s	447.55	Joback Method

Sources

NIST Webbook:	http://webbook.nist.gov/cgi/cbook.cgi?ID=R405802&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
rinpol:	Non-polar retention indices
tb:	Normal Boiling Point Temperature
tc:	Critical Temperature
tf:	Normal melting (fusion) point
vc:	Critical Volume