1-Decene, 6-butyl

Inchi: InChI=1S/C14H28/c1-4-7-10-13-14(11-8-5-2)12-9-6-3/h4,14H,1,5-13H2,2-3H3
InchiKey: AGRNWBQTSNFMAX-UHFFFAOYSA-N
Formula: C14H28
SMILES: C=CCCCC(CCCC)CCCC
Mol. weight [g/mol]: 196.37

Physical Properties

Property code	Value	Unit	Source
gf	152.40	kJ/mol	Joback Method
hf	-212.14	kJ/mol	Joback Method
hfus	27.21	kJ/mol	Joback Method
hvap	45.70	kJ/mol	Joback Method
log10ws	-5.29		Crippen Method
logp	5.339		Crippen Method
mcvol	203.820	ml/mol	McGowan Method
pc	1584.75	kPa	Joback Method
rinpol	1304.00		NIST Webbook
tb	515.96	K	Joback Method
tc	681.17	K	Joback Method
tf	230.78	K	Joback Method
vc	0.794	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	486.73	J/mol×K	515.96	Joback Method
cpg	569.86	J/mol×K	653.63	Joback Method
cpg	554.62	J/mol×K	626.10	Joback Method
cpg	538.70	J/mol×K	598.56	Joback Method
cpg	522.09	J/mol×K	571.03	Joback Method
cpg	504.78	J/mol×K	543.49	Joback Method
cpg	584.47	J/mol×K	681.17	Joback Method
dvisc	0.0001766	Pa×s	515.96	Joback Method
dvisc	0.0002420	Pa×s	468.43	Joback Method

dvisc	0.0003561	Pa×s	420.90	Joback Method
dvisc	0.0005779	Pa×s	373.37	Joback Method
dvisc	0.0010804	Pa×s	325.84	Joback Method
dvisc	0.0025008	Pa×s	278.31	Joback Method
dvisc	0.0081794	Pa×s	230.78	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=R46801&Units=SI
Crippen Method:	http://pubs.acs.org/doi/abs/10.1021/ci990307l
Crippen Method:	https://www.chemeo.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
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