1-Dodecene, 8-butyl

Inchi: InChI=1S/C16H32/c1-4-7-10-11-12-15-16(13-8-5-2)14-9-6-3/h4,16H,1,5-15H2,2-3H3
InchiKey: KHOQSOIAIHMQRA-UHFFFAOYSA-N
Formula: C16H32
SMILES: C=CCCCCCC(CCCC)CCCC
Mol. weight [g/mol]: 224.43

Physical Properties

Property code	Value	Unit	Source
gf	169.24	kJ/mol	Joback Method
hf	-253.42	kJ/mol	Joback Method
hfus	32.39	kJ/mol	Joback Method
hvap	50.15	kJ/mol	Joback Method
log10ws	-6.13		Crippen Method
logp	6.120		Crippen Method
mcvol	232.000	ml/mol	McGowan Method
pc	1367.69	kPa	Joback Method
rinpol	1495.00		NIST Webbook
rinpol	1495.00		NIST Webbook
tb	561.72	K	Joback Method
tc	725.31	K	Joback Method
tf	253.32	K	Joback Method
vc	0.906	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	591.12	J/mol×K	561.72	Joback Method
cpg	679.00	J/mol×K	698.05	Joback Method
cpg	662.89	J/mol×K	670.78	Joback Method
cpg	646.08	J/mol×K	643.52	Joback Method
cpg	628.52	J/mol×K	616.25	Joback Method
cpg	610.21	J/mol×K	588.99	Joback Method
cpg	694.42	J/mol×K	725.31	Joback Method
dvisc	0.0001472	Pa×s	561.72	Joback Method

dvisc	0.0002030	Pa×s	510.32	Joback Method
dvisc	0.0003006	Pa×s	458.92	Joback Method
dvisc	0.0004916	Pa×s	407.52	Joback Method
dvisc	0.0009266	Pa×s	356.12	Joback Method
dvisc	0.0021629	Pa×s	304.72	Joback Method
dvisc	0.0071217	Pa×s	253.32	Joback Method

Sources

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
NIST Webbook:	http://webbook.nist.gov/cgi/cbook.cgi?ID=R167114&Units=SI

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

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