

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/molxK	561.72	Joback Method
cpg	610.21	J/molxK	588.99	Joback Method
cpg	628.52	J/molxK	616.25	Joback Method
cpg	646.08	J/molxK	643.52	Joback Method
cpg	662.89	J/molxK	670.78	Joback Method
cpg	679.00	J/molxK	698.05	Joback Method
cpg	694.42	J/molxK	725.31	Joback Method
dvisc	0.0071217	Paxs	253.32	Joback Method

dvisc	0.0021629	Paxs	304.72	Joback Method
dvisc	0.0009266	Paxs	356.12	Joback Method
dvisc	0.0004916	Paxs	407.52	Joback Method
dvisc	0.0003006	Paxs	458.92	Joback Method
dvisc	0.0002030	Paxs	510.32	Joback Method
dvisc	0.0001472	Paxs	561.72	Joback Method

Sources

McGowan Method:	http://link.springer.com/article/10.1007/BF02311772
NIST Webbook:	http://webbook.nist.gov/cgi/cbook.cgi?ID=R167114&Units=SI
Crippen Method:	http://pubs.acs.org/doi/abs/10.1021/ci9903071
Crippen Method:	https://www.chemeo.com/doc/models/crippen_log10ws
Joback Method:	https://en.wikipedia.org/wiki/Joback_method

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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