1-Dodecene, 3,7,11-trimethyl

Inchi: InChI=1S/C15H30/c1-6-14(4)10-8-12-15(5)11-7-9-13(2)3/h6,13-15H,1,7-12H2,2-5H3
InchiKey: YRTZHYFUDNIOGV-UHFFFAOYSA-N
Formula: C15H30
SMILES: C=CC(C)CCCC(C)CCCC(C)C
Mol. weight [g/mol]: 210.40

Physical Properties

Property code	Value	Unit	Source
gf	155.94	kJ/mol	Joback Method
hf	-243.34	kJ/mol	Joback Method
hfus	22.76	kJ/mol	Joback Method
hvap	47.15	kJ/mol	Joback Method
log10ws	-5.23		Crippen Method
logp	5.441		Crippen Method
mcvol	217.910	ml/mol	McGowan Method
pc	1488.44	kPa	Joback Method
rinpol	1354.00		NIST Webbook
tb	537.96	K	Joback Method
tc	708.27	K	Joback Method
tf	212.05	K	Joback Method
vc	0.839	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	538.51	J/mol×K	537.96	Joback Method
cpg	557.91	J/mol×K	566.34	Joback Method
cpg	576.48	J/mol×K	594.73	Joback Method
cpg	594.25	J/mol×K	623.11	Joback Method
cpg	611.25	J/mol×K	651.50	Joback Method
cpg	627.49	J/mol×K	679.88	Joback Method
cpg	643.00	J/mol×K	708.27	Joback Method
dvisc	0.0225843	Pa×s	212.05	Joback Method
dvisc	0.0041124	Pa×s	266.37	Joback Method

dvisc	0.0013334	Pa×s	320.69	Joback Method
dvisc	0.0005992	Pa×s	375.00	Joback Method
dvisc	0.0003296	Pa×s	429.32	Joback Method
dvisc	0.0002074	Pa×s	483.64	Joback Method
dvisc	0.0001433	Pa×s	537.96	Joback Method

Sources

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=R46851&Units=SI
Crippen Method:	http://pubs.acs.org/doi/abs/10.1021/ci990307l

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