

3-Tetradecene

Inchi:	InChI=1S/C14H28/c1-3-5-7-9-11-13-14-12-10-8-6-4-2/h5,7H,3-4,6,8-14H2,1-2H3
InchiKey:	QKTFNIWYLYTNIS-UHFFFAOYSA-N
Formula:	C14H28
SMILES:	CCC=CCCCCCCCCCC
Mol. weight [g/mol]:	196.37
CAS:	41446-67-7

Physical Properties

Property code	Value	Unit	Source
gf	147.22	kJ/mol	Joback Method
hf	-215.07	kJ/mol	Joback Method
hfus	32.22	kJ/mol	Joback Method
hvap	46.72	kJ/mol	Joback Method
log10ws	-5.54		Crippen Method
logp	5.483		Crippen Method
mvol	203.820	ml/mol	McGowan Method
pc	1587.28	kPa	Joback Method
rinpol	1382.00		NIST Webbook
rinpol	1416.00		NIST Webbook
tb	523.88	K	Joback Method
tc	689.82	K	Joback Method
tf	242.46	K	Joback Method
vc	0.799	m ³ /kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	488.90	J/mol×K	523.88	Joback Method
cpg	506.77	J/mol×K	551.54	Joback Method
cpg	523.90	J/mol×K	579.19	Joback Method
cpg	540.31	J/mol×K	606.85	Joback Method
cpg	556.03	J/mol×K	634.51	Joback Method
cpg	571.08	J/mol×K	662.16	Joback Method
cpg	585.50	J/mol×K	689.82	Joback Method

dvisc	0.0054364	Paxs	242.46	Joback Method
dvisc	0.0018593	Paxs	289.36	Joback Method
dvisc	0.0008577	Paxs	336.27	Joback Method
dvisc	0.0004782	Paxs	383.17	Joback Method
dvisc	0.0003029	Paxs	430.07	Joback Method
dvisc	0.0002098	Paxs	476.98	Joback Method
dvisc	0.0001553	Paxs	523.88	Joback Method

Correlations

Information	Value
Property code	pvap
Equation	$\ln(P_{vp}) = A + B/(T + C)$
Coeff. A	1.65756e+01
Coeff. B	-5.12329e+03
Coeff. C	-8.79760e+01
Temperature range (K), min.	402.52
Temperature range (K), max.	542.81

Sources

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
McGowan Method:	http://link.springer.com/article/10.1007/BF02311772
NIST Webbook:	http://webbook.nist.gov/cgi/cbook.cgi?ID=R72767&Units=SI
The Yaws Handbook of Vapor Pressure:	https://www.sciencedirect.com/book/9780128029992/the-yaws-handbook-of-vapor-pressure

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
mccvol:	McGowan's characteristic volume
pc:	Critical Pressure
pvap:	Vapor pressure
rinpolar:	Non-polar retention indices
tb:	Normal Boiling Point Temperature
tc:	Critical Temperature
tf:	Normal melting (fusion) point
vc:	Critical Volume

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