

7-Tetradecanol

Inchi:	InChI=1S/C14H30O/c1-3-5-7-9-11-13-14(15)12-10-8-6-4-2/h14-15H,3-13H2,1-2H3
InchiKey:	FFAQYGTZIMVBFJ-UHFFFAOYSA-N
Formula:	C14H30O
SMILES:	CCCCCCCC(O)CCCCC
Mol. weight [g/mol]:	214.39
CAS:	3981-79-1

Physical Properties

Property code	Value	Unit	Source
gf	-72.26	kJ/mol	Joback Method
hf	-489.80	kJ/mol	Joback Method
hfus	32.58	kJ/mol	Joback Method
hvap	63.05	kJ/mol	Joback Method
log10ws	-5.06		Crippen Method
logp	4.678		Crippen Method
mvol	213.990	ml/mol	McGowan Method
pc	1649.77	kPa	Joback Method
rinpol	1666.00		NIST Webbook
rinpol	1666.00		NIST Webbook
ripol	1961.00		NIST Webbook
ripol	1961.00		NIST Webbook
tb	611.46	K	Joback Method
tc	771.56	K	Joback Method
tf	293.36	K	Joback Method
vc	0.833	m ³ /kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	583.00	J/mol×K	611.46	Joback Method
cpg	657.10	J/mol×K	744.87	Joback Method
cpg	643.50	J/mol×K	718.19	Joback Method
cpg	629.31	J/mol×K	691.51	Joback Method
cpg	614.51	J/mol×K	664.83	Joback Method

cpg	599.08	J/mol×K	638.14	Joback Method
cpg	670.12	J/mol×K	771.56	Joback Method
dvisc	0.0000558	Paxs	611.46	Joback Method
dvisc	0.0000944	Paxs	558.44	Joback Method
dvisc	0.0001784	Paxs	505.43	Joback Method
dvisc	0.0003911	Paxs	452.41	Joback Method
dvisc	0.0010562	Paxs	399.39	Joback Method
dvisc	0.0038664	Paxs	346.38	Joback Method
dvisc	0.0226239	Paxs	293.36	Joback Method

Correlations

Information	Value
Property code	pvap
Equation	$\ln(P_{vp}) = A + B/(T + C)$
Coeff. A	1.62855e+01
Coeff. B	-5.38620e+03
Coeff. C	-9.60380e+01
Temperature range (K), min.	432.72
Temperature range (K), max.	586.85

Sources

NIST Webbook:	http://webbook.nist.gov/cgi/cbook.cgi?ID=C3981791&Units=SI
The Yaws Handbook of Vapor Pressure:	https://www.sciencedirect.com/book/9780128029992/the-yaws-handbook-of-vapor-pressure
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

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
pvap:	Vapor pressure
rinpol:	Non-polar retention indices
ripol:	Polar retention indices
tb:	Normal Boiling Point Temperature
tc:	Critical Temperature
tf:	Normal melting (fusion) point
vc:	Critical Volume

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