Tetradecanol

Inchi: InChI=1S/C14H30O/c1-2-3-4-5-6-7-8-9-10-11-12-13-14-15/h15H,2-14H2,1H3
InchiKey: HLZKNKRTKFSKGZ-UHFFFAOYSA-N
Formula: C14H30O
SMILES: CCCCCCCCCCCCCCO
Mol. weight [g/mol]: 214.39
CAS: 27196-00-5

Physical Properties

Property code	Value	Unit	Source
gf	-69.82	kJ/mol	Joback Method
hf	-484.52	kJ/mol	Joback Method
hfus	36.10	kJ/mol	Joback Method
hvap	63.44	kJ/mol	Joback Method
log10ws	-4.95		Crippen Method
logp	4.680		Crippen Method
mcvol	213.990	ml/mol	McGowan Method
pc	1639.10	kPa	Joback Method
rinpol	1676.00		NIST Webbook
rinpol	1687.00		NIST Webbook
rinpol	1654.00		NIST Webbook
rinpol	1676.00		NIST Webbook
rinpol	1681.00		NIST Webbook
rinpol	1664.00		NIST Webbook
rinpol	1675.40		NIST Webbook
rinpol	1673.00		NIST Webbook
rinpol	1682.00		NIST Webbook
rinpol	1677.00		NIST Webbook
rinpol	1685.00		NIST Webbook
rinpol	1687.00		NIST Webbook
rinpol	1677.00		NIST Webbook
rinpol	1677.00		NIST Webbook
rinpol	1676.00		NIST Webbook
rinpol	1677.00		NIST Webbook
rinpol	1665.00		NIST Webbook
rinpol	1676.00		NIST Webbook
rinpol	1674.00		NIST Webbook
rinpol	1664.10		NIST Webbook

rinpol	1681.00		NIST Webbook
rinpol	1666.00		NIST Webbook
rinpol	1674.00		NIST Webbook
rinpol	1676.00		NIST Webbook
rinpol	1664.00		NIST Webbook
rinpol	1653.00		NIST Webbook
rinpol	1671.00		NIST Webbook
rinpol	1678.00		NIST Webbook
rinpol	1654.00		NIST Webbook
rinpol	1676.00		NIST Webbook
ripol	2177.00		NIST Webbook
ripol	2167.00		NIST Webbook
ripol	2179.00		NIST Webbook
ripol	2164.00		NIST Webbook
ripol	2177.00		NIST Webbook
ripol	2169.00		NIST Webbook
ripol	2179.00		NIST Webbook
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ripol	2169.00		NIST Webbook
ripol	2179.00		NIST Webbook
ripol	2179.00		NIST Webbook
ripol	2176.00		NIST Webbook
ripol	2179.00		NIST Webbook
ripol	2167.00		NIST Webbook
ripol	2134.00		NIST Webbook
ripol	2164.00		NIST Webbook
ripol	2186.00		NIST Webbook
ripol	2205.00		NIST Webbook
ripol	2144.00		NIST Webbook
ripol	2188.00		NIST Webbook
ripol	2168.00		NIST Webbook
tb	611.90	K	Joback Method
tc	769.95	K	Joback Method
tf	308.36	K	Joback Method
vc	0.839	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	582.64	J/mol×K	611.90	Joback Method

cpg	655.72	J/mol×K	743.61	Joback Method
cpg	642.29	J/mol×K	717.27	Joback Method
cpg	628.28	J/mol×K	690.93	Joback Method
cpg	613.68	J/mol×K	664.58	Joback Method
cpg	598.48	J/mol×K	638.24	Joback Method
cpg	668.61	J/mol×K	769.95	Joback Method
dvisc	0.0000598	Pa×s	611.90	Joback Method
dvisc	0.0000978	Pa×s	561.31	Joback Method
dvisc	0.0001767	Pa×s	510.72	Joback Method
dvisc	0.0003633	Pa×s	460.13	Joback Method
dvisc	0.0008925	Pa×s	409.54	Joback Method
dvisc	0.0028250	Pa×s	358.95	Joback Method
dvisc	0.0130512	Pa×s	308.36	Joback Method

Sources

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=C27196005&Units=SI
Crippen Method:	http://pubs.acs.org/doi/abs/10.1021/ci990307l
Crippen Method:	https://www.chemeo.com/doc/models/crippen_log10ws

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
ripol:	Polar retention indices
tb:	Normal Boiling Point Temperature
tc:	Critical Temperature

tf:	Normal melting (fusion) point
vc:	Critical Volume

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