1-Decanol, 2-hexyl-

Other names:	2-Hexyl-1-decanol
	2-Hexyldecanol
	2-Hexyldecyl alcohol
	2-hexyldecan-1-ol
	Exxal 16
	Guerbet C16
	Guerbet hexadecanol
	Guerbitol 16
	Isofol 16
	Jarcol I 16
	NJCOL 160BR
	NJCOL 160BRA
	NSC 2399
	Rilanit G 16
Inchi:	InChI=1S/C16H34O/c1-3-5-7-9-10-12-14-16(15-17)13-11-8-6-4-2/h16-17H,3-15H2,1-2H3
InchiKey:	XULHFMYCBKQGEE-UHFFFAOYSA-N
Formula:	C16H34O
SMILES:	CCCCCCCCC(CO)CCCCCC
Mol. weight [g/mol]:	242.44
CAS:	2425-77-6

Physical Properties

Property code	Value	Unit	Source
gf	-55.42	kJ/mol	Joback Method
hf	-531.08	kJ/mol	Joback Method
hfus	37.76	kJ/mol	Joback Method
hvap	67.50	kJ/mol	Joback Method
log10ws	-5.54		Crippen Method
logp	5.316		Crippen Method
mcvol	242.170	ml/mol	McGowan Method
pc	1419.71	kPa	Joback Method
rinpol	1504.00		NIST Webbook
ripol	2760.00		NIST Webbook
tb	657.22	K	Joback Method
tc	818.60	K	Joback Method
tf	245.00 ± 6.00	K	NIST Webbook
vc	0.945	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	692.99	J/mol×K	657.22	Joback Method
cpg	771.81	J/mol×K	791.70	Joback Method
cpg	757.38	J/mol×K	764.81	Joback Method
cpg	742.31	J/mol×K	737.91	Joback Method
cpg	726.57	J/mol×K	711.01	Joback Method
cpg	710.14	J/mol×K	684.12	Joback Method
cpg	785.60	J/mol×K	818.60	Joback Method
dvisc	0.0000384	Pa×s	657.22	Joback Method
dvisc	0.0000643	Pa×s	600.33	Joback Method
dvisc	0.0001199	Pa×s	543.45	Joback Method
dvisc	0.0002587	Pa×s	486.56	Joback Method
dvisc	0.0006842	Pa×s	429.67	Joback Method
dvisc	0.0024349	Pa×s	372.79	Joback Method
dvisc	0.0136883	Pa×s	315.90	Joback Method

Correlations

Information	Value
Property code	pvap
Equation	ln(Pvp) = A + B/(T + C)
Coeff. A	1.47395e+01
Coeff. B	-4.95152e+03
Coeff. C	-9.92000e+01
Temperature range (K), min.	441.82
Temperature range (K), max.	624.39

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=C2425776&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/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
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