1-Hexacosanol

Other names:	Ceryl alcohol
	Cerylic alcohol
	Hexacosyl alcohol
	hexacosan-1-ol
	n-Hexacosanol
Inchi:	InChI=1S/C26H54O/c1-2-3-4-5-6-7-8-9-10-11-12-13-14-15-16-17-18-19-20-21-22-23-24-
InchiKey:	IRHTZOCLLONTOC-UHFFFAOYSA-N
Formula:	C26H54O
SMILES:	CCCCCCCCCCCCCCCCCCCCCCCCCCO
Mol. weight [g/mol]:	382.71
CAS:	506-52-5

Physical Properties

Property code	Value	Unit	Source
gf	31.22	kJ/mol	Joback Method
hf	-732.20	kJ/mol	Joback Method
hfus	67.18	kJ/mol	Joback Method
hvap	90.15	kJ/mol	Joback Method
log10ws	-9.97		Crippen Method
logp	9.361		Crippen Method
mcvol	383.070	ml/mol	McGowan Method
pc	762.26	kPa	Joback Method
rinpol	2848.00		NIST Webbook
rinpol	2852.00		NIST Webbook
tb	886.46	K	Joback Method
tc	1093.46	K	Joback Method
tf	353.10	K	Evaluation of the Vaporization, Fusion, and Sublimation Enthalpies of the 1-Alkanols: The Vaporization Enthalpy of 1-, 6-, 7-, and 9-Heptadecanol, 1-Octadecanol, 1-Eicosanol, 1-Docosanol, 1-Hexacosanol, and Cholesterol at T) 298.15 K by Correlation Gas Chromatography
vc	1.510	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	1305.54	J/mol×K	886.46	Joback Method
cpg	1412.48	J/mol×K	1058.96	Joback Method
cpg	1393.50	J/mol×K	1024.46	Joback Method
cpg	1373.39	J/mol×K	989.96	Joback Method
cpg	1352.08	J/mol×K	955.46	Joback Method
cpg	1329.49	J/mol×K	920.96	Joback Method
cpg	1430.40	J/mol×K	1093.46	Joback Method
dvisc	0.0000064	Pa×s	886.46	Joback Method
dvisc	0.0000102	Pa×s	812.65	Joback Method
dvisc	0.0000177	Pa×s	738.84	Joback Method
dvisc	0.0000346	Pa×s	665.03	Joback Method
dvisc	0.0000802	Pa×s	591.22	Joback Method
dvisc	0.0002362	Pa×s	517.41	Joback Method
dvisc	0.0009972	Pa×s	443.60	Joback Method

Correlations

Information	Value
Property code	pvap
Equation	ln(Pvp) = A + B/(T + C)
Coeff. A	1.51573e+01
Coeff. B	-6.09187e+03
Coeff. C	-1.34916e+02
Temperature range (K), min.	544.60
Temperature range (K), max.	753.64

Sources

Crippen Method:	http://pubs.acs.org/doi/abs/10.1021/ci990307l
Crippen Method:	https://www.chemeo.com/doc/models/crippen_log10ws
Evaluation of the Vaporization, Fusion, and Sublimation Enthalpies of the 1-Alkanols: The Vaporization Enthalpy of 1-, 6-, 7-, and 9-Heptadecanol, 1-Octadecanol, 1-Eicosanol, 1-Docosanol, 1-Hexacosanol, and Cholesterol at T) 298.15 K by Correlation Gas Chromatography:	https://www.doi.org/10.1021/je0503857

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=C506525&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
mcvol:	McGowan's characteristic volume
pc:	Critical Pressure
pvap:	Vapor pressure
rinpol:	Non-polar retention indices
tb:	Normal Boiling Point Temperature
tc:	Critical Temperature
tf:	Normal melting (fusion) point
vc:	Critical Volume