9-Octadecen-1-ol, (Z)-

Other names:

(Z)-9-octadecenol
(9Z)-9-Octadecen-1-ol
(Z)-9-Octadecen-1-ol
(Z)-octadec-9-enol
9-Octadecen-1-ol
9-Octadecen-1-ol, (9Z)-
9-Octadecen-1-ol, cis-
Adol 320
Adol 330
Adol 34
Adol 340
Adol 80
Adol 85
Adol 90
Anjecol 90N
Anjecol 90NR
Atalco O
Cachalot O-1
Cachalot O-15
Cachalot O-3
Cachalot O-8
Conditioner 1
Crodacol A.10
Crodacol-O
Dermaffine
Emery 3312
Emery 3317
Fancol OA-95
H.D. eutanol
HD oleyl alcohol 70/75
HD oleyl alcohol 80/85
HD oleyl alcohol 90/95
HD oleyl alcohol CG
HD-Echelon 90/95
HD-Eutanol
HD-Ocenol 90/95
HD-Ocenol K
Lancol
Lipocol O
Loxanol 95

Loxanol M
Novol
Ocenol
Oceol
Octadec-9-en-1-ol
Octadec-9-en-1-ol, (Z)-
Octadec-9Z-enol
Octadeca-9-cis-en-1-ol
Oleic alcohol
Oleo alcohol
Oleol
Oleyl alcohol
Olive alcohol
Satol
Sipol O
Siponol OC
Unjecol 110
Unjecol 50
Unjecol 70
Unjecol 90
Unjecol 90N
Unjecol 90NR
cis-9-Octadecen-1-ol
cis-9-Octadecenyl Alcohol
cis-«DELTA»9-Octadecenol
cis-Â«DELTAÂ»9-Octadecenol

Inchi: InChI=1S/C18H36O/c1-2-3-4-5-6-7-8-9-10-11-12-13-14-15-16-17-18-19/h9-10,19H,2-8,1

InchiKey: ALSTYHKOOCGGFT-KTKRTIGZSA-N

Formula: C18H36O

SMILES: CCCCCCCCC=CCCCCCCCCO

Mol. weight [g/mol]: 268.48

CAS: 143-28-2

Physical Properties

Property code	Value	Unit	Source
gf	44.08	kJ/mol	Joback Method
hf	-449.86	kJ/mol	Joback Method
hfus	46.67	kJ/mol	Joback Method
hvap	119.30	kJ/mol	NIST Webbook

log10ws	-6.47		Crippen Method
logp	6.016		Crippen Method
mcvol	266.050	ml/mol	McGowan Method
pc	1273.69	kPa	Joback Method
rinpol	2066.00		NIST Webbook
rinpol	2060.00		NIST Webbook
rinpol	2068.80		NIST Webbook
rinpol	2060.00		NIST Webbook
ripol	2116.00		NIST Webbook
tb	707.58	K	Joback Method
tc	874.01	K	Joback Method
tf	273.15 ± 3.00	K	NIST Webbook
tf	309.00 ± 2.00	K	NIST Webbook
tf	272.15	K	The manufacture of organic carbonate-poly(methyl ethylacrylate) nanowebs with thermal buffering effect
vc	1.042	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	879.39	J/mol×K	874.01	Joback Method
cpg	785.17	J/mol×K	707.58	Joback Method
cpg	802.67	J/mol×K	735.32	Joback Method
cpg	819.41	J/mol×K	763.06	Joback Method
cpg	835.41	J/mol×K	790.79	Joback Method
cpg	850.72	J/mol×K	818.53	Joback Method
cpg	865.37	J/mol×K	846.27	Joback Method
dvisc	0.0000243	Pa×s	707.58	Joback Method
dvisc	0.0053551	Pa×s	348.36	Joback Method
dvisc	0.0011274	Pa×s	408.23	Joback Method
dvisc	0.0003536	Pa×s	468.10	Joback Method
dvisc	0.0001442	Pa×s	527.97	Joback Method
dvisc	0.0000706	Pa×s	587.84	Joback Method
dvisc	0.0000395	Pa×s	647.71	Joback Method
pvap	2.00	kPa	480.05	Phase equilibria of liquid (water + butyric acid + oleyl alcohol) ternary system

rfi	1.46030		293.15	Liquid phase equilibria of (water + propionic acid + oleyl alcohol) ternary system at several temperatures

Pressure Dependent Properties

Property code	Value	Unit	Pressure [kPa]	Source
tbrp	480.20	K	1.70	NIST Webbook
tbrp	480.00	K	1.70	NIST Webbook
tbrp	480.70	K	2.00	NIST Webbook

Correlations

Information	Value
Property code	pvap
Equation	ln(Pvp) = A + B/(T + C)
Coeff. A	1.50364e+01
Coeff. B	-5.53733e+03
Coeff. C	-1.18278e+02
Temperature range (K), min.	493.72
Temperature range (K), max.	687.67

Sources

Crippen Method:	http://pubs.acs.org/doi/abs/10.1021/ci990307l
The manufacture of organic carbonate-poly(methyl ethylacrylate) nanowebs with thermal buffering effect:	https://www.doi.org/10.1016/j.tca.2017.10.003
NIST Webbook:	http://webbook.nist.gov/cgi/cbook.cgi?ID=C143282&Units=SI
Phase equilibria of liquid (water + butyric acid + oleyl alcohol) ternary system:	https://www.doi.org/10.1016/j.jct.2006.03.017
McGowan Method:	http://link.springer.com/article/10.1007/BF02311772
(Liquid + liquid) phase equilibria for (water + 2,3-butanediol + oleyl alcohol) at T = (300.2, 307.2, and 314.2) K:	https://www.doi.org/10.1016/j.jct.2008.10.004
The Yaws Handbook of Vapor Pressure:	https://www.sciencedirect.com/book/9780128029992/the-yaws-handbook-of-vapor-pressure
Crippen Method:	https://www.chemeo.com/doc/models/crippen_log10ws

Liquid phase equilibria of (water + propionic acid + oleyl alcohol) ternary system at several temperatures: https://www.doi.org/10.1016/j.fluid.2006.10.005

Joback Method: https://en.wikipedia.org/wiki/Joback_method

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
rfi:	Refractive Index
rinpol:	Non-polar retention indices
ripol:	Polar retention indices
tb:	Normal Boiling Point Temperature
tbrp:	Boiling point at reduced pressure
tc:	Critical Temperature
tf:	Normal melting (fusion) point
vc:	Critical Volume