

1-Nonen-3-ol

Other names:	1-Nonene-3-ol 1-Vinylheptanol 3-Hydroxy-1-nonene Hexylvinylcarbinol NSC 102782 Non-1-en-3-ol Nonene-1-ol-3
Inchi:	InChI=1S/C9H18O/c1-3-5-6-7-8-9(10)4-2/h4,9-10H,2-3,5-8H2,1H3
InchiKey:	DWUPJMHAPQKQJ-UHFFFAOYSA-N
Formula:	C9H18O
SMILES:	C=CC(O)CCCCC
Mol. weight [g/mol]:	142.24
CAS:	21964-44-3

Physical Properties

Property code	Value	Unit	Source
gf	-26.52	kJ/mol	Joback Method
hf	-261.17	kJ/mol	Joback Method
hfus	18.35	kJ/mol	Joback Method
hvap	51.25	kJ/mol	Joback Method
log10ws	-2.82		Crippen Method
logp	2.504		Crippen Method
mcvol	139.240	ml/mol	McGowan Method
pc	2657.03	kPa	Joback Method
rinpol	1064.00		NIST Webbook
rinpol	1114.00		NIST Webbook
rinpol	1066.00		NIST Webbook
rinpol	1090.00		NIST Webbook
rinpol	1068.00		NIST Webbook
rinpol	1081.00		NIST Webbook
rinpol	1078.00		NIST Webbook
rinpol	1070.00		NIST Webbook
rinpol	1064.00		NIST Webbook
rinpol	1058.00		NIST Webbook
rinpol	1058.00		NIST Webbook
rinpol	1066.00		NIST Webbook
rinpol	1079.00		NIST Webbook

rinpol	1088.00		NIST Webbook
rinpol	1072.00		NIST Webbook
ripol	1525.00		NIST Webbook
ripol	1560.00		NIST Webbook
ripol	1554.00		NIST Webbook
ripol	1555.00		NIST Webbook
ripol	1525.00		NIST Webbook
ripol	1561.00		NIST Webbook
tb	493.74	K	Joback Method
tc	658.65	K	Joback Method
tf	235.25	K	Joback Method
vc	0.533	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	316.61	J/mol×K	493.74	Joback Method
cpg	372.70	J/mol×K	631.17	Joback Method
cpg	362.42	J/mol×K	603.68	Joback Method
cpg	351.69	J/mol×K	576.20	Joback Method
cpg	340.49	J/mol×K	548.71	Joback Method
cpg	328.80	J/mol×K	521.23	Joback Method
cpg	382.54	J/mol×K	658.65	Joback Method
dvisc	0.0001453	Pa×s	493.74	Joback Method
dvisc	0.0002522	Pa×s	450.66	Joback Method
dvisc	0.0004922	Pa×s	407.58	Joback Method
dvisc	0.0011249	Pa×s	364.50	Joback Method
dvisc	0.0032084	Pa×s	321.41	Joback Method
dvisc	0.0126586	Pa×s	278.33	Joback Method
dvisc	0.0825669	Pa×s	235.25	Joback Method

Correlations

Information	Value
Property code	pvap
Equation	$\ln(P_{vp}) = A + B/(T + C)$
Coeff. A	1.33664e+01
Coeff. B	-3.73766e+03

Coeff. C	-7.07400e+01
Temperature range (K), min.	356.52
Temperature range (K), max.	534.76

Sources

Crippen Method:	http://pubs.acs.org/doi/abs/10.1021/ci990307l
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
NIST Webbook:	http://webbook.nist.gov/cgi/cbook.cgi?ID=C21964443&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
ripol:	Polar retention indices
tb:	Normal Boiling Point Temperature
tc:	Critical Temperature
tf:	Normal melting (fusion) point
vc:	Critical Volume

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