2-Nonen-1-ol

Other names: 2-Nonene-1-ol
Non-2-en-1-ol
Inchi: InChI=1S/C9H18O/c1-2-3-4-5-6-7-8-9-10/h7-8,10H,2-6,9H2,1H3
InchiKey: NSSALFVIQPAIQK-UHFFFAOYSA-N
Formula: C9H18O
SMILES: CCCCCCC=CCO
Mol. weight [g/mol]: 142.24
CAS: 22104-79-6

Physical Properties

Property code	Value	Unit	Source
gf	-31.70	kJ/mol	Joback Method
hf	-264.10	kJ/mol	Joback Method
hfus	23.36	kJ/mol	Joback Method
hvap	52.27	kJ/mol	Joback Method
log10ws	-2.71		Crippen Method
logp	2.505		Crippen Method
mcvol	139.240	ml/mol	McGowan Method
pc	2662.52	kPa	Joback Method
rinpol	1105.00		NIST Webbook
rinpol	1051.00		NIST Webbook
rinpol	1051.00		NIST Webbook
ripol	1692.00		NIST Webbook
ripol	1692.00		NIST Webbook
tb	501.66	K	Joback Method
tc	667.34	K	Joback Method
tf	246.93	K	Joback Method
vc	0.538	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	317.11	J/mol×K	501.66	Joback Method
cpg	329.17	J/mol×K	529.27	Joback Method

cpg	340.72	J/mol×K	556.89	Joback Method
cpg	351.78	J/mol×K	584.50	Joback Method
cpg	362.36	J/mol×K	612.11	Joback Method
cpg	372.49	J/mol×K	639.73	Joback Method
cpg	382.18	J/mol×K	667.34	Joback Method
dvisc	0.0432087	Pa×s	246.93	Joback Method
dvisc	0.0079294	Pa×s	289.38	Joback Method
dvisc	0.0022455	Pa×s	331.84	Joback Method
dvisc	0.0008466	Pa×s	374.30	Joback Method
dvisc	0.0003894	Pa×s	416.75	Joback Method
dvisc	0.0002067	Pa×s	459.21	Joback Method
dvisc	0.0001222	Pa×s	501.66	Joback Method

Correlations

Information	Value
Property code	pvap
Equation	ln(Pvp) = A + B/(T + C)
Coeff. A	1.50585e+01
Coeff. B	-4.39676e+03
Coeff. C	-7.68560e+01
Temperature range (K), min.	374.52
Temperature range (K), max.	527.94

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=C22104796&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