

Nonanol

Other names:	nonan-1-ol
Inchi:	InChI=1S/C9H20O/c1-2-3-4-5-6-7-8-9-10/h10H,2-9H2,1H3
InchiKey:	ZWRUINPWMLAQRD-UHFFFAOYSA-N
Formula:	C9H20O
SMILES:	CCCCCCCCCO
Mol. weight [g/mol]:	144.25
CAS:	28473-21-4

Physical Properties

Property code	Value	Unit	Source
gf	-111.92	kJ/mol	Joback Method
hf	-381.32	kJ/mol	Joback Method
hfus	23.15	kJ/mol	Joback Method
hvap	52.31	kJ/mol	Joback Method
log10ws	-2.85		Crippen Method
logp	2.729		Crippen Method
mcvol	143.540	ml/mol	McGowan Method
pc	2525.19	kPa	Joback Method
rinpol	1172.00		NIST Webbook
rinpol	1161.30		NIST Webbook
rinpol	1140.00		NIST Webbook
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ripol	1685.00	NIST Webbook
ripol	1664.00	NIST Webbook

ripol	1630.00		NIST Webbook
tb	497.50	K	Joback Method
tc	656.58	K	Joback Method
tf	252.01	K	Joback Method
vc	0.558	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	334.38	J/mol×K	497.50	Joback Method
cpg	346.81	J/mol×K	524.01	Joback Method
cpg	358.77	J/mol×K	550.53	Joback Method
cpg	370.28	J/mol×K	577.04	Joback Method
cpg	381.35	J/mol×K	603.56	Joback Method
cpg	391.99	J/mol×K	630.07	Joback Method
cpg	402.22	J/mol×K	656.58	Joback Method
dvisc	0.0415724	Pa×s	252.01	Joback Method
dvisc	0.0084367	Pa×s	292.93	Joback Method
dvisc	0.0025311	Pa×s	333.84	Joback Method
dvisc	0.0009877	Pa×s	374.75	Joback Method
dvisc	0.0004639	Pa×s	415.67	Joback Method
dvisc	0.0002495	Pa×s	456.58	Joback Method
dvisc	0.0001486	Pa×s	497.50	Joback Method

Sources

McGowan Method:	http://link.springer.com/article/10.1007/BF02311772
NIST Webbook:	http://webbook.nist.gov/cgi/cbook.cgi?ID=C28473214&Units=SI
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

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
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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