(E,Z)-2,4-nonadienal

Other names: 2,4-(E,Z)-Nonadienal
Inchi: InChI=1S/C9H14O/c1-2-3-4-5-6-7-8-9-10/h5-9H,2-4H2,1H3/b6-5-,8-7+
InchiKey: ZHHYXNZJDGDGPJ-IGTJQSIKSA-N
Formula: C9H14O
SMILES: CCCCC=CC=CC=O
Mol. weight [g/mol]: 138.21

Physical Properties

Property code	Value	Unit	Source
gf	85.82	kJ/mol	Joback Method
hf	-80.23	kJ/mol	Joback Method
hfus	21.76	kJ/mol	Joback Method
hvap	42.26	kJ/mol	Joback Method
log10ws	-2.58		Crippen Method
logp	2.488		Crippen Method
mcvol	130.640	ml/mol	McGowan Method
pc	2758.46	kPa	Joback Method
rinpol	1196.00		NIST Webbook
rinpol	1193.00		NIST Webbook
rinpol	1196.00		NIST Webbook
rinpol	1200.00		NIST Webbook
rinpol	1196.00		NIST Webbook
rinpol	1196.00		NIST Webbook
rinpol	1209.00		NIST Webbook
rinpol	1196.00		NIST Webbook
rinpol	1196.00		NIST Webbook
rinpol	1190.00		NIST Webbook
rinpol	1188.00		NIST Webbook
rinpol	1188.00		NIST Webbook
rinpol	1206.00		NIST Webbook
rinpol	1193.00		NIST Webbook
rinpol	1196.00		NIST Webbook
rinpol	1195.00		NIST Webbook
rinpol	1191.00		NIST Webbook
rinpol	1206.00		NIST Webbook
rinpol	1196.00		NIST Webbook
rinpol	1196.00		NIST Webbook

rinpol	1194.00		NIST Webbook
ripol	1647.00		NIST Webbook
ripol	1632.00		NIST Webbook
ripol	1655.00		NIST Webbook
ripol	1646.00		NIST Webbook
ripol	1650.00		NIST Webbook
ripol	1617.00		NIST Webbook
ripol	1655.00		NIST Webbook
ripol	1643.00		NIST Webbook
ripol	1627.00		NIST Webbook
ripol	1626.00		NIST Webbook
ripol	1643.00		NIST Webbook
ripol	1643.00		NIST Webbook
ripol	1670.00		NIST Webbook
ripol	1632.00		NIST Webbook
ripol	1636.00		NIST Webbook
ripol	1632.00		NIST Webbook
tb	462.30	K	Joback Method
tc	648.39	K	Joback Method
tf	223.03	K	Joback Method
vc	0.516	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	266.24	J/mol×K	462.30	Joback Method
cpg	278.77	J/mol×K	493.32	Joback Method
cpg	290.63	J/mol×K	524.33	Joback Method
cpg	301.85	J/mol×K	555.35	Joback Method
cpg	312.48	J/mol×K	586.36	Joback Method
cpg	322.54	J/mol×K	617.38	Joback Method
cpg	332.06	J/mol×K	648.39	Joback Method
dvisc	0.0043918	Pa×s	223.03	Joback Method
dvisc	0.0018105	Pa×s	262.91	Joback Method
dvisc	0.0009426	Pa×s	302.79	Joback Method
dvisc	0.0005712	Pa×s	342.66	Joback Method
dvisc	0.0003843	Pa×s	382.54	Joback Method
dvisc	0.0002786	Pa×s	422.42	Joback Method
dvisc	0.0002135	Pa×s	462.30	Joback Method

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=R236889&Units=SI
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
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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