(Z)-4-Decen-1-ol

Other names:	(4Z)-4-Decen-1-ol
	(Z)-4-Decenol
	4-Decen-1-ol, (Z)-
	4Z-Decen-1-ol
	cis-4-Decen-1-ol
	cis-4-Decenol
Inchi:	InChI=1S/C10H20O/c1-2-3-4-5-6-7-8-9-10-11/h6-7,11H,2-5,8-10H2,1H3/b7-6-
InchiKey:	VUNFOJWKJSYIDH-SREVYHEPSA-N
Formula:	C10H20O
SMILES:	CCCCCC=CCCCO
Mol. weight [g/mol]:	156.27
CAS:	57074-37-0

Physical Properties

Property code	Value	Unit	Source
gf	-23.28	kJ/mol	Joback Method
hf	-284.74	kJ/mol	Joback Method
hfus	25.95	kJ/mol	Joback Method
hvap	79.60	kJ/mol	NIST Webbook
log10ws	-3.13		Crippen Method
logp	2.895		Crippen Method
mcvol	153.330	ml/mol	McGowan Method
pc	2417.12	kPa	Joback Method
rinpol	1258.00		NIST Webbook
rinpol	1258.00		NIST Webbook
rinpol	1257.00		NIST Webbook
rinpol	1242.00		NIST Webbook
rinpol	1241.00		NIST Webbook
rinpol	1243.00		NIST Webbook
rinpol	1257.00		NIST Webbook
rinpol	1264.30		NIST Webbook
rinpol	1257.00		NIST Webbook
rinpol	1240.00		NIST Webbook
rinpol	1242.00		NIST Webbook
rinpol	1243.00		NIST Webbook
rinpol	1258.00		NIST Webbook
rinpol	1213.00		NIST Webbook

rinpol	1257.00		NIST Webbook
rinpol	1241.00		NIST Webbook
rinpol	1213.00		NIST Webbook
rinpol	1240.00		NIST Webbook
ripol	1784.00		NIST Webbook
ripol	1797.00		NIST Webbook
tb	524.54	K	Joback Method
tc	689.26	K	Joback Method
tf	258.20	K	Joback Method
vc	0.595	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	362.81	J/mol×K	524.54	Joback Method
cpg	375.67	J/mol×K	551.99	Joback Method
cpg	387.98	J/mol×K	579.45	Joback Method
cpg	399.77	J/mol×K	606.90	Joback Method
cpg	411.06	J/mol×K	634.36	Joback Method
cpg	421.86	J/mol×K	661.81	Joback Method
cpg	432.20	J/mol×K	689.26	Joback Method
dvisc	0.0338296	Pa×s	258.20	Joback Method
dvisc	0.0063373	Pa×s	302.59	Joback Method
dvisc	0.0018223	Pa×s	346.98	Joback Method
dvisc	0.0006952	Pa×s	391.37	Joback Method
dvisc	0.0003228	Pa×s	435.76	Joback Method
dvisc	0.0001727	Pa×s	480.15	Joback Method
dvisc	0.0001027	Pa×s	524.54	Joback Method

Correlations

Information	Value
Property code	pvap
Equation	ln(Pvp) = A + B/(T + C)
Coeff. A	1.47068e+01
Coeff. B	-4.41251e+03
Coeff. C	-8.13040e+01
Temperature range (K), min.	387.32

Temperature range (K), max.	550.95

Sources

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=C57074370&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

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