

(Z)-4-Decen-2-ol

Inchi:	InChI=1S/C10H20O/c1-3-4-5-6-7-8-9-10(2)11/h7-8,10-11H,3-6,9H2,1-2H3/b8-7-
InchiKey:	IBZXVOROLBWCCD-FPLPWBNLSA-N
Formula:	C10H20O
SMILES:	CCCCC=CCC(C)O
Mol. weight [g/mol]:	156.27

Physical Properties

Property code	Value	Unit	Source
gf	-25.72	kJ/mol	Joback Method
hf	-290.02	kJ/mol	Joback Method
hfus	22.42	kJ/mol	Joback Method
hvap	54.10	kJ/mol	Joback Method
log10ws	-3.24		Crippen Method
logp	2.894		Crippen Method
mvol	153.330	ml/mol	McGowan Method
pc	2436.25	kPa	Joback Method
ripol	1794.00		NIST Webbook
ripol	1794.00		NIST Webbook
tb	524.10	K	Joback Method
tc	691.87	K	Joback Method
tf	243.20	K	Joback Method
vc	0.589	m ³ /kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	363.07	J/molxK	524.10	Joback Method
cpg	376.23	J/molxK	552.06	Joback Method
cpg	388.81	J/molxK	580.02	Joback Method
cpg	400.85	J/molxK	607.98	Joback Method
cpg	412.35	J/molxK	635.95	Joback Method
cpg	423.36	J/molxK	663.91	Joback Method
cpg	433.87	J/molxK	691.87	Joback Method
dvisc	0.0698968	Paxs	243.20	Joback Method

dvisc	0.0096333	Paxs	290.02	Joback Method
dvisc	0.0023033	Paxs	336.83	Joback Method
dvisc	0.0007809	Paxs	383.65	Joback Method
dvisc	0.0003350	Paxs	430.47	Joback Method
dvisc	0.0001696	Paxs	477.28	Joback Method
dvisc	0.0000970	Paxs	524.10	Joback Method

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=R577605&Units=SI
Crippen Method:	http://pubs.acs.org/doi/abs/10.1021/ci990307l

Legend

cp_g:	Ideal gas heat capacity
dvisc:	Dynamic viscosity
g_f:	Standard Gibbs free energy of formation
h_f:	Enthalpy of formation at standard conditions
h_{fus}:	Enthalpy of fusion at standard conditions
h_{vap}:	Enthalpy of vaporization at standard conditions
log₁₀w_s:	Log ₁₀ of Water solubility in mol/l
log_p:	Octanol/Water partition coefficient
mc_{vol}:	McGowan's characteristic volume
pc:	Critical Pressure
rip_{ol}:	Polar retention indices
tb:	Normal Boiling Point Temperature
tc:	Critical Temperature
tf:	Normal melting (fusion) point
vc:	Critical Volume

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