3-Octanol, 3,7-dimethyl-

Other names:	Linalool tetrahydride
	Tetrahydrolinalool
	2,6-Dimethyl-6-octanol
	3,7-Dimethyloctan-3-ol
	3,7-Dimethyl-3-octanol
	3,7-Dimethyloctanol-3
	NSC 128151
	Dihydrolinalool
Inchi:	InChI=1S/C10H22O/c1-5-10(4,11)8-6-7-9(2)3/h9,11H,5-8H2,1-4H3
InchiKey:	DLHQZZUEERVIGQ-UHFFFAOYSA-N
Formula:	C10H22O
SMILES:	CCC(C)(O)CCCC(C)C
Mol. weight [g/mol]:	158.28
CAS:	78-69-3

Physical Properties

Property code	Value	Unit	Source
gf	-103.10	kJ/mol	Joback Method
hf	-415.99	kJ/mol	Joback Method
hfus	14.81	kJ/mol	Joback Method
hvap	52.85	kJ/mol	Joback Method
log10ws	-3.14		Crippen Method
logp	2.974		Crippen Method
mcvol	157.630	ml/mol	McGowan Method
pc	2358.78	kPa	Joback Method
rinpol	1097.00		NIST Webbook
rinpol	1098.00		NIST Webbook
rinpol	1089.00		NIST Webbook
rinpol	1088.90		NIST Webbook
rinpol	1098.00		NIST Webbook
rinpol	1076.00		NIST Webbook
rinpol	1091.00		NIST Webbook
rinpol	1097.00		NIST Webbook
rinpol	1097.00		NIST Webbook
rinpol	1098.00		NIST Webbook
rinpol	1130.00		NIST Webbook
rinpol	1086.00		NIST Webbook

rinpol	1131.00		NIST Webbook
rinpol	1134.00		NIST Webbook
rinpol	1134.00		NIST Webbook
rinpol	1087.00		NIST Webbook
rinpol	1089.00		NIST Webbook
rinpol	1091.00		NIST Webbook
rinpol	1088.00		NIST Webbook
rinpol	1089.00		NIST Webbook
ripol	1398.00		NIST Webbook
ripol	1402.00		NIST Webbook
ripol	1397.00		NIST Webbook
ripol	1397.00		NIST Webbook
ripol	1402.00		NIST Webbook
ripol	1431.00		NIST Webbook
ripol	1412.00		NIST Webbook
ripol	1414.00		NIST Webbook
ripol	1420.00		NIST Webbook
ripol	1398.00		NIST Webbook
ripol	1394.00		NIST Webbook
ripol	1397.00		NIST Webbook
tb	468.00 ± 8.00	K	NIST Webbook
tc	686.53	K	Joback Method
tf	250.70	K	Joback Method
vc	0.598	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	383.78	J/mol×K	516.71	Joback Method
cpg	398.19	J/mol×K	545.01	Joback Method
cpg	411.92	J/mol×K	573.32	Joback Method
cpg	425.02	J/mol×K	601.62	Joback Method
cpg	437.50	J/mol×K	629.92	Joback Method
cpg	449.39	J/mol×K	658.22	Joback Method
cpg	460.72	J/mol×K	686.53	Joback Method
dvisc	0.0899105	Pa×s	250.70	Joback Method
dvisc	0.0128169	Pa×s	295.03	Joback Method
dvisc	0.0030395	Pa×s	339.37	Joback Method
dvisc	0.0010052	Pa×s	383.71	Joback Method
dvisc	0.0004181	Pa×s	428.04	Joback Method
dvisc	0.0002050	Pa×s	472.38	Joback Method

dvisc	0.0001136	Pa×s	516.71	Joback Method

Sources

McGowan Method:	http://link.springer.com/article/10.1007/BF02311772
NIST Webbook:	http://webbook.nist.gov/cgi/cbook.cgi?ID=C78693&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