Fenchol

Other names:	Bicyclo[2.2.1]heptan-2-ol, 1,3,3-trimethyl-
	2-Norbornanol, 1,3,3-trimethyl-
	Fenchyl alcohol
	1,3,3-Trimethyl-2-norbornanol
	2-Fenchanol
	1,3,3-Trimethylbicyclo[2.2.1]heptan-2-ol
	Fenchylic alcohol
	D-Fenchyl alcohol
	(+)-Fenchol
	3,3-dimethyl-8,9-dinorbornan-2-ol
Inchi:	InChI=1S/C10H18O/c1-9(2)7-4-5-10(3,6-7)8(9)11/h7-8,11H,4-6H2,1-3H3/t7-,8+,10?/m0/s
InchiKey:	IAIHUHQCLTYTSF-VLCSVPMDSA-N
Formula:	C10H18O
SMILES:	CC12CCC(C1)C(C)(C)C2O
Mol. weight [g/mol]:	154.25
CAS:	1632-73-1

Physical Properties

Property code	Value	Unit	Source
gf	-20.50	kJ/mol	Joback Method
hf	-272.72	kJ/mol	Joback Method
hfus	9.46	kJ/mol	Joback Method
hvap	51.61	kJ/mol	Joback Method
log10ws	-2.45		Crippen Method
logp	2.194		Crippen Method
mcvol	135.910	ml/mol	McGowan Method
pc	3166.83	kPa	Joback Method
rinpol	1092.00		NIST Webbook
rinpol	1117.00		NIST Webbook
rinpol	1120.00		NIST Webbook
rinpol	1088.00		NIST Webbook
rinpol	1138.00		NIST Webbook
rinpol	1111.00		NIST Webbook
rinpol	1084.00		NIST Webbook
rinpol	1105.00		NIST Webbook
rinpol	1101.00		NIST Webbook
rinpol	1104.00		NIST Webbook

rinpol	1108.00	NIST Webbook
rinpol	1106.00	NIST Webbook
rinpol	1111.00	NIST Webbook
rinpol	1098.00	NIST Webbook
rinpol	1111.00	NIST Webbook
rinpol	1116.00	NIST Webbook
rinpol	1109.00	NIST Webbook
rinpol	1111.00	NIST Webbook
rinpol	1113.00	NIST Webbook
rinpol	1113.00	NIST Webbook
rinpol	1106.00	NIST Webbook
rinpol	1096.00	NIST Webbook
rinpol	1103.00	NIST Webbook
rinpol	1098.00	NIST Webbook
rinpol	1110.00	NIST Webbook
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rinpol	1124.00	NIST Webbook
rinpol	1123.00	NIST Webbook
rinpol	1117.00	NIST Webbook
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rinpol	1110.00	NIST Webbook
rinpol	1100.00	NIST Webbook
rinpol	1084.00	NIST Webbook
rinpol	1117.00	NIST Webbook
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ripol	1588.00		NIST Webbook
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ripol	1580.00		NIST Webbook
ripol	1582.00		NIST Webbook
ripol	1581.00		NIST Webbook
ripol	1588.00		NIST Webbook
ripol	1577.00		NIST Webbook
ripol	1570.00		NIST Webbook
ripol	1573.00		NIST Webbook
ripol	1582.00		NIST Webbook
ripol	1597.00		NIST Webbook
ripol	1574.00		NIST Webbook
ripol	1571.00		NIST Webbook
ripol	1574.00		NIST Webbook
tb	529.27	K	Joback Method
tc	730.21	K	Joback Method
tf	319.15 ± 1.50	K	NIST Webbook
tf	314.65 ± 0.20	K	NIST Webbook
vc	0.514	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	354.30	J/mol×K	529.27	Joback Method
cpg	370.25	J/mol×K	562.76	Joback Method
cpg	385.05	J/mol×K	596.25	Joback Method
cpg	398.92	J/mol×K	629.74	Joback Method
cpg	412.02	J/mol×K	663.23	Joback Method
cpg	424.55	J/mol×K	696.72	Joback Method
cpg	436.70	J/mol×K	730.21	Joback Method

Sources

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
McGowan Method:	http://link.springer.com/article/10.1007/BF02311772
NIST Webbook:	http://webbook.nist.gov/cgi/cbook.cgi?ID=C1632731&Units=SI

Legend

cpg:	Ideal gas heat capacity
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