«alpha»-Fenchol

Other names:	«alpha»-Fenchyl alcohol
	endo-«alpha»-Fenchol
	(1S-endo)-1,3,3-trimethylbicyclo[2.2.1]heptan-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-ZCUBBSJVSA-N
Formula:	C10H18O
SMILES:	CC12CCC(C1)C(C)(C)C2O
Mol. weight [g/mol]:	154.25
CAS:	512-13-0

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	1102.00		NIST Webbook
rinpol	1112.00		NIST Webbook
rinpol	1100.00		NIST Webbook
rinpol	1112.00		NIST Webbook
rinpol	1103.00		NIST Webbook
rinpol	1098.00		NIST Webbook
rinpol	1117.00		NIST Webbook
rinpol	1094.00		NIST Webbook
rinpol	1117.00		NIST Webbook
rinpol	1094.00		NIST Webbook
rinpol	1094.00		NIST Webbook
rinpol	1112.00		NIST Webbook
rinpol	1106.00		NIST Webbook
rinpol	1120.00		NIST Webbook
rinpol	1100.00		NIST Webbook
rinpol	1112.00		NIST Webbook
rinpol	1103.00		NIST Webbook

rinpol	1120.00	NIST Webbook
rinpol	1117.00	NIST Webbook
rinpol	1115.00	NIST Webbook
rinpol	1098.00	NIST Webbook
rinpol	1102.00	NIST Webbook
rinpol	1098.00	NIST Webbook
rinpol	1088.00	NIST Webbook
rinpol	1100.00	NIST Webbook
rinpol	1112.00	NIST Webbook
rinpol	1120.00	NIST Webbook
rinpol	1095.00	NIST Webbook
rinpol	1100.00	NIST Webbook
rinpol	1102.00	NIST Webbook
rinpol	1110.00	NIST Webbook
rinpol	1112.00	NIST Webbook
rinpol	1099.00	NIST Webbook
rinpol	1104.00	NIST Webbook
rinpol	1112.00	NIST Webbook
rinpol	1128.00	NIST Webbook
rinpol	1101.00	NIST Webbook
rinpol	1110.00	NIST Webbook
rinpol	1088.00	NIST Webbook
rinpol	1088.00	NIST Webbook
rinpol	1101.00	NIST Webbook
rinpol	1103.00	NIST Webbook
rinpol	1102.00	NIST Webbook
rinpol	1120.00	NIST Webbook
rinpol	1112.00	NIST Webbook
rinpol	1108.00	NIST Webbook
rinpol	1106.00	NIST Webbook
rinpol	1098.00	NIST Webbook
rinpol	1094.00	NIST Webbook
rinpol	1114.00	NIST Webbook
rinpol	1121.00	NIST Webbook
rinpol	1111.90	NIST Webbook
rinpol	1121.00	NIST Webbook
rinpol	1116.00	NIST Webbook
rinpol	1123.00	NIST Webbook
ripol	1574.00	NIST Webbook
ripol	1572.00	NIST Webbook
ripol	1574.00	NIST Webbook
ripol	1565.00	NIST Webbook
ripol	1557.00	NIST Webbook
ripol	1573.00	NIST Webbook

ripol	1581.00		NIST Webbook
ripol	1593.00		NIST Webbook
ripol	1578.00		NIST Webbook
ripol	1574.00		NIST Webbook
ripol	1581.00		NIST Webbook
ripol	1574.00		NIST Webbook
ripol	1572.00		NIST Webbook
ripol	1577.00		NIST Webbook
tb	529.27	K	Joback Method
tc	730.21	K	Joback Method
tf	334.96	K	Joback Method
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: 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=C512130&Units=SI
Crippen Method: http://pubs.acs.org/doi/abs/10.1021/ci990307l

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

Latest version available from:

https://www.chemeo.com/cid/32-892-6/alpha-Fenchol.pdf

Generated by Cheméo on 2024-10-12 08:30:04.275440919 +0000 UTC m=+3302666.912410167.

Cheméo (https://www.chemeo.com) is the biggest free database of chemical and physical data for the process industry.