

Tetrahydropyrane, 2-(2-methylpropyl)

Inchi: InChI=1S/C9H18O2/c1-8(2)7-11-9-5-3-4-6-10-9/h8-9H,3-7H2,1-2H3
InchiKey: ZDFZISUAJPDZKM-UHFFFAOYSA-N
Formula: C9H18O2
SMILES: CC(C)COC1CCCCO1
Mol. weight [g/mol]: 158.24

Physical Properties

Property code	Value	Unit	Source
gf	-144.21	kJ/mol	Joback Method
hf	-444.27	kJ/mol	Joback Method
hfus	16.54	kJ/mol	Joback Method
hvap	42.59	kJ/mol	Joback Method
log10ws	-2.02		Crippen Method
logp	2.186		Crippen Method
mcvol	138.550	ml/mol	McGowan Method
pc	2784.72	kPa	Joback Method
rinpol	1030.00		NIST Webbook
tb	473.80	K	Joback Method
tc	675.82	K	Joback Method
tf	232.37	K	Joback Method
vc	0.505	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	315.43	J/mol×K	473.80	Joback Method
cpg	333.39	J/mol×K	507.47	Joback Method
cpg	350.53	J/mol×K	541.14	Joback Method
cpg	366.86	J/mol×K	574.81	Joback Method
cpg	382.39	J/mol×K	608.48	Joback Method
cpg	397.13	J/mol×K	642.15	Joback Method
cpg	411.08	J/mol×K	675.82	Joback Method
dvisc	0.0092265	Pa×s	232.37	Joback Method
dvisc	0.0031962	Pa×s	272.61	Joback Method

dvisc	0.0014543	Pa×s	312.85	Joback Method
dvisc	0.0007918	Pa×s	353.09	Joback Method
dvisc	0.0004882	Pa×s	393.32	Joback Method
dvisc	0.0003293	Pa×s	433.56	Joback Method
dvisc	0.0002375	Pa×s	473.80	Joback Method

Sources

McGowan Method:	http://link.springer.com/article/10.1007/BF02311772
NIST Webbook:	http://webbook.nist.gov/cgi/cbook.cgi?ID=R91333&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
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/22-254-5/Tetrahydropyrane-2-2-methylpropyl.pdf>

Generated by Cheméo on 2025-12-21 23:26:35.211223632 +0000 UTC m=+6107792.741264286.

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