

2-Propanol, 2-methyl-d

Inchi:	InChI=1S/C4H10O/c1-4(2,3)5/h5H,1-3H3/i5D
InchiKey:	DKGAVHZHDRPRBM-UICOGKGYSA-N
Formula:	C4H9DO
SMILES:	CC(C)(C)O
Mol. weight [g/mol]:	75.13

Physical Properties

Property code	Value	Unit	Source
gf	-151.18	kJ/mol	Joback Method
hf	-286.87	kJ/mol	Joback Method
hfus	2.79	kJ/mol	Joback Method
hvap	39.88	kJ/mol	Joback Method
log10ws	-0.87		Crippen Method
logp	0.777		Crippen Method
mcvol	73.090	ml/mol	McGowan Method
pc	4498.26	kPa	Joback Method
tb	379.87	K	Joback Method
tc	552.43	K	Joback Method
tf	198.08	K	Joback Method
vc	0.268	m ³ /kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	135.92	J/molxK	379.87	Joback Method
cpg	144.16	J/molxK	408.63	Joback Method
cpg	151.98	J/molxK	437.39	Joback Method
cpg	159.41	J/molxK	466.15	Joback Method
cpg	166.45	J/molxK	494.91	Joback Method
cpg	173.13	J/molxK	523.67	Joback Method
cpg	179.46	J/molxK	552.43	Joback Method
dvisc	0.2371823	Paxs	198.08	Joback Method
dvisc	0.0402785	Paxs	228.38	Joback Method
dvisc	0.0103620	Paxs	258.68	Joback Method

dvisc	0.0035437	Paxs	288.98	Joback Method
dvisc	0.0014856	Paxs	319.27	Joback Method
dvisc	0.0007241	Paxs	349.57	Joback Method
dvisc	0.0003958	Paxs	379.87	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=B6010145&Units=SI
Crippen Method:	http://pubs.acs.org/doi/abs/10.1021/ci990307i

Legend

cp_g:	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
h_{vap}:	Enthalpy of vaporization at standard conditions
log₁₀ws:	Log ₁₀ of Water solubility in mol/l
log_p:	Octanol/Water partition coefficient
mcvol:	McGowan's characteristic volume
pc:	Critical Pressure
tb:	Normal Boiling Point Temperature
tc:	Critical Temperature
tf:	Normal melting (fusion) point
vc:	Critical Volume

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