

(CD3)2O

Inchi: InChI=1S/C2H6O/c1-3-2/h1-2H3/i1D3,2D3
InchiKey: LCGLNKUTAGEVQW-WFGJKAKNSA-N
Formula: C2D6O
SMILES: COC
Mol. weight [g/mol]: 52.11
CAS: 17222-37-6

Physical Properties

Property code	Value	Unit	Source
affp	780.40	kJ/mol	NIST Webbook
basg	753.00	kJ/mol	NIST Webbook
gf	-139.04	kJ/mol	Joback Method
hf	-216.83	kJ/mol	Joback Method
hfus	2.12	kJ/mol	Joback Method
hvap	22.46	kJ/mol	Joback Method
log10ws	0.25		Crippen Method
logp	0.263		Crippen Method
mcvol	44.910	ml/mol	McGowan Method
pc	4910.80	kPa	Joback Method
tb	267.58	K	Joback Method
tc	427.85	K	Joback Method
tf	134.53	K	Joback Method
vc	0.166	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	62.58	J/mol×K	267.58	Joback Method
cpg	80.43	J/mol×K	401.14	Joback Method
cpg	76.92	J/mol×K	374.43	Joback Method
cpg	73.37	J/mol×K	347.72	Joback Method
cpg	69.79	J/mol×K	321.00	Joback Method
cpg	66.19	J/mol×K	294.29	Joback Method
cpg	83.92	J/mol×K	427.85	Joback Method

dvisc	0.0001398	Pa×s	267.58	Joback Method
dvisc	0.0001724	Pa×s	245.40	Joback Method
dvisc	0.0002216	Pa×s	223.23	Joback Method
dvisc	0.0003012	Pa×s	201.06	Joback Method
dvisc	0.0004416	Pa×s	178.88	Joback Method
dvisc	0.0007217	Pa×s	156.70	Joback Method
dvisc	0.0013866	Pa×s	134.53	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=C17222376&Units=SI

Legend

affp:	Proton affinity
basg:	Gas basicity
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
tb:	Normal Boiling Point Temperature
tc:	Critical Temperature
tf:	Normal melting (fusion) point
vc:	Critical Volume

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