

1,1-Dimethoxy-3,3-dimethylbutane

Inchi:	InChI=1S/C8H18O2/c1-8(2,3)6-7(9-4)10-5/h7H,6H2,1-5H3
InchiKey:	XQXASMBOOKNENN-UHFFFAOYSA-N
Formula:	C8H18O2
SMILES:	COC(CC(C)(C)C)OC
Mol. weight [g/mol]:	146.23
CAS:	78263-32-8

Physical Properties

Property code	Value	Unit	Source
gf	-193.12	kJ/mol	Joback Method
hf	-486.92	kJ/mol	Joback Method
hfus	7.92	kJ/mol	Joback Method
hvap	36.54	kJ/mol	Joback Method
log10ws	-1.71		Crippen Method
logp	2.042		Crippen Method
mcvol	135.320	ml/mol	McGowan Method
pc	2517.59	kPa	Joback Method
tb	423.61	K	Joback Method
tc	602.03	K	Joback Method
tf	211.80	K	Joback Method
vc	0.502	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	284.39	J/molxK	423.61	Joback Method
cpg	349.90	J/molxK	572.29	Joback Method
cpg	337.84	J/molxK	542.55	Joback Method
cpg	325.27	J/molxK	512.82	Joback Method
cpg	312.17	J/molxK	483.08	Joback Method
cpg	298.55	J/molxK	453.35	Joback Method
cpg	361.46	J/molxK	602.03	Joback Method
dvisc	0.0001947	Paxs	423.61	Joback Method
dvisc	0.0002736	Paxs	388.31	Joback Method

dvisc	0.0004117	Paxs	353.01	Joback Method
dvisc	0.0006783	Paxs	317.71	Joback Method
dvisc	0.0012661	Paxs	282.40	Joback Method
dvisc	0.0028247	Paxs	247.10	Joback Method
dvisc	0.0082347	Paxs	211.80	Joback Method

Sources

NIST Webbook:	http://webbook.nist.gov/cgi/cbook.cgi?ID=C78263328&Units=SI
Crippen Method:	http://pubs.acs.org/doi/abs/10.1021/ci9903071
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

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
tb:	Normal Boiling Point Temperature
tc:	Critical Temperature
tf:	Normal melting (fusion) point
vc:	Critical Volume

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