

Benzene, 1,3-dimethoxy-2-decyl-5-methyl

Inchi:	InChI=1S/C19H32O2/c1-5-6-7-8-9-10-11-12-13-17-18(20-3)14-16(2)15-19(17)21-4/h14-1
InchiKey:	RPEVHAHAXUHDRW-UHFFFAOYSA-N
Formula:	C19H32O2
SMILES:	CCCCCCCCCc1c(OC)cc(C)cc1OC
Mol. weight [g/mol]:	292.46

Physical Properties

Property code	Value	Unit	Source
gf	-17.38	kJ/mol	Joback Method
hf	-497.81	kJ/mol	Joback Method
hfus	40.22	kJ/mol	Joback Method
hvap	66.97	kJ/mol	Joback Method
log10ws	-6.34		Crippen Method
logp	5.695		Crippen Method
mvol	266.550	ml/mol	McGowan Method
pc	1284.67	kPa	Joback Method
rinpol	2083.00		NIST Webbook
rinpol	2083.00		NIST Webbook
tb	720.58	K	Joback Method
tc	906.77	K	Joback Method
tf	412.33	K	Joback Method
vc	1.028	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	772.66	J/molxK	720.58	Joback Method
cpg	791.48	J/molxK	751.61	Joback Method
cpg	809.36	J/molxK	782.64	Joback Method
cpg	826.31	J/molxK	813.68	Joback Method
cpg	842.32	J/molxK	844.71	Joback Method
cpg	857.42	J/molxK	875.74	Joback Method
cpg	871.62	J/molxK	906.77	Joback Method
dvisc	0.0006578	Paxs	412.33	Joback Method

dvisc	0.0003619	Paxs	463.71	Joback Method
dvisc	0.0002244	Paxs	515.08	Joback Method
dvisc	0.0001517	Paxs	566.45	Joback Method
dvisc	0.0001094	Paxs	617.83	Joback Method
dvisc	0.0000830	Paxs	669.20	Joback Method
dvisc	0.0000655	Paxs	720.58	Joback Method

Sources

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
NIST Webbook:	http://webbook.nist.gov/cgi/cbook.cgi?ID=R142808&Units=SI

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

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