

Benzene, 1,3-dimethoxy-5-decyl

Inchi:	InChI=1S/C18H30O2/c1-4-5-6-7-8-9-10-11-12-16-13-17(19-2)15-18(14-16)20-3/h13-15H
InchiKey:	CHZYOZPJYPLOAO-UHFFFAOYSA-N
Formula:	C18H30O2
SMILES:	CCCCCCCCCc1cc(OC)cc(OC)c1
Mol. weight [g/mol]:	278.43

Physical Properties

Property code	Value	Unit	Source
gf	-16.17	kJ/mol	Joback Method
hf	-465.70	kJ/mol	Joback Method
hfus	38.01	kJ/mol	Joback Method
hvap	64.08	kJ/mol	Joback Method
log10ws	-5.86		Crippen Method
logp	5.387		Crippen Method
mvol	252.460	ml/mol	McGowan Method
pc	1393.33	kPa	Joback Method
rinpol	2120.00		NIST Webbook
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tb	692.72	K	Joback Method
tc	878.81	K	Joback Method
tf	388.54	K	Joback Method
vc	0.972	m ³ /kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	715.20	J/molxK	692.72	Joback Method
cpg	799.20	J/molxK	847.80	Joback Method
cpg	784.20	J/molxK	816.78	Joback Method
cpg	768.31	J/molxK	785.77	Joback Method
cpg	751.52	J/molxK	754.75	Joback Method
cpg	733.83	J/molxK	723.74	Joback Method
cpg	813.32	J/molxK	878.81	Joback Method
dvisc	0.0000737	Paxs	692.72	Joback Method

dvisc	0.0000945	Paxs	642.02	Joback Method
dvisc	0.0001265	Paxs	591.33	Joback Method
dvisc	0.0001787	Paxs	540.63	Joback Method
dvisc	0.0002713	Paxs	489.93	Joback Method
dvisc	0.0004534	Paxs	439.24	Joback Method
dvisc	0.0008665	Paxs	388.54	Joback Method

Sources

Crippen Method:	http://pubs.acs.org/doi/abs/10.1021/ci9903071
Crippen Method:	https://www.cheméo.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=R143143&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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