Tricyclo[3.3.1.1(3,7)]decane, 2-methoxy-

Other names:	Adamantane, 2-methoxy- 2-Methoxyadamantane 2-Adamantyl methyl ether Adamantylmethylether
Inchi:	InChI=1S/C11H18O/c1-12-11-9-3-7-2-8(5-9)6-10(11)4-7/h7-11H,2-6H2,1H3
InchiKey:	FYDHICUFQYUQPE-UHFFFAOYSA-N
Formula:	C11H18O
SMILES:	COC1C2CC3CC(C2)CC1C3
Mol. weight [g/mol]:	166.26
CAS:	19066-23-0

Physical Properties

Property code	Value	Unit	Source
affp	860.20	kJ/mol	NIST Webbook
basg	831.00	kJ/mol	NIST Webbook
gf	91.47	kJ/mol	Joback Method
hf	-231.03	kJ/mol	Joback Method
hfus	19.88	kJ/mol	Joback Method
hvap	41.78	kJ/mol	Joback Method
log10ws	-2.34		Crippen Method
logp	2.458		Crippen Method
mcvol	139.140	ml/mol	McGowan Method
pc	2651.56	kPa	Joback Method
tb	488.65	K	Joback Method
tc	697.28	K	Joback Method
tf	277.78	K	Joback Method
vc	0.530	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	348.03	J/mol×K	488.65	Joback Method
cpg	369.22	J/mol×K	523.42	Joback Method
cpg	389.13	J/mol×K	558.19	Joback Method

cpg	407.82	J/mol×K	592.96	Joback Method
cpg	425.35	J/mol×K	627.73	Joback Method
cpg	441.81	J/mol×K	662.51	Joback Method
cpg	457.26	J/mol×K	697.28	Joback Method
dvisc	0.0007253	Pa×s	277.78	Joback Method
dvisc	0.0008394	Pa×s	312.92	Joback Method
dvisc	0.0009432	Pa×s	348.07	Joback Method
dvisc	0.0010374	Pa×s	383.21	Joback Method
dvisc	0.0011228	Pa×s	418.36	Joback Method
dvisc	0.0012006	Pa×s	453.50	Joback Method
dvisc	0.0012713	Pa×s	488.65	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=C19066230&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