

Adamantanol

Inchi:	InChI=1S/C10H16O/c11-10-4-7-1-8(5-10)3-9(2-7)6-10/h7-9,11H,1-6H2/t7-,8+,9-,10-
InchiKey:	VLLNJDMHDJRNFK-CHIWXEEVSA-N
Formula:	C10H16O
SMILES:	OC12CC3CC(CC(C3)C1)C2
Mol. weight [g/mol]:	152.23

Physical Properties

Property code	Value	Unit	Source
gf	53.45	kJ/mol	Joback Method
hf	-194.82	kJ/mol	Joback Method
hfus	12.82	kJ/mol	Joback Method
hvap	52.98	kJ/mol	Joback Method
log10ws	-2.34		Crippen Method
logp	1.948		Crippen Method
mcvol	125.050	ml/mol	McGowan Method
pc	3633.35	kPa	Joback Method
ripol	1146.00		NIST Webbook
ripol	1661.00		NIST Webbook
ripol	1661.00		NIST Webbook
tb	540.44	K	Joback Method
tc	748.34	K	Joback Method
tf	333.24	K	Joback Method
vc	0.474	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	339.80	J/molxK	540.44	Joback Method
cpg	356.31	J/molxK	575.09	Joback Method
cpg	371.60	J/molxK	609.74	Joback Method
cpg	385.82	J/molxK	644.39	Joback Method
cpg	399.13	J/molxK	679.04	Joback Method
cpg	411.71	J/molxK	713.69	Joback Method
cpg	423.72	J/molxK	748.34	Joback Method

Sources

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=R440172&Units=SI
Crippen Method:	http://pubs.acs.org/doi/abs/10.1021/ci990307l
Crippen Method:	https://www.cheméo.com/doc/models/crippen_log10ws

Legend

cp_g:	Ideal gas heat capacity
g_f:	Standard Gibbs free energy of formation
h_f:	Enthalpy of formation at standard conditions
h_{fus}:	Enthalpy of fusion at standard conditions
h_{vap}:	Enthalpy of vaporization at standard conditions
log₁₀ws:	Log ₁₀ of Water solubility in mol/l
log_p:	Octanol/Water partition coefficient
mc_{vol}:	McGowan's characteristic volume
pc:	Critical Pressure
rin_{pol}:	Non-polar retention indices
rip_{ol}:	Polar retention indices
tb:	Normal Boiling Point Temperature
tc:	Critical Temperature
tf:	Normal melting (fusion) point
vc:	Critical Volume

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