

Tricyclo[8.3.0.0(4,9)]dodecane, isomer # 2

Inchi: InChI=1S/C13H22/c1-2-6-12-10(4-1)8-9-11-5-3-7-13(11)12/h10-13H,1-9H2
InchiKey: DDBLMNQGXXGZOS-UHFFFAOYSA-N
Formula: C13H22
SMILES: C1CCC2C(C1)CCC1CCCC12
Mol. weight [g/mol]: 178.31

Physical Properties

Property code	Value	Unit	Source
gf	184.72	kJ/mol	Joback Method
hf	-138.23	kJ/mol	Joback Method
hfus	16.50	kJ/mol	Joback Method
hvap	44.65	kJ/mol	Joback Method
log10ws	-3.98		Crippen Method
logp	4.003		Crippen Method
mcvol	161.450	ml/mol	McGowan Method
pc	2477.65	kPa	Joback Method
rinpol	1422.00		NIST Webbook
rinpol	1446.00		NIST Webbook
ripol	1652.00		NIST Webbook
ripol	1613.00		NIST Webbook
tb	529.47	K	Joback Method
tc	757.82	K	Joback Method
tf	271.77	K	Joback Method
vc	0.602	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	421.40	J/molxK	529.47	Joback Method
cpg	447.35	J/molxK	567.53	Joback Method
cpg	471.54	J/molxK	605.59	Joback Method
cpg	494.09	J/molxK	643.64	Joback Method
cpg	515.09	J/molxK	681.70	Joback Method
cpg	534.62	J/molxK	719.76	Joback Method

cpg	552.80	J/mol×K	757.82	Joback Method
dvisc	0.0024413	Paxs	271.77	Joback Method
dvisc	0.0018128	Paxs	314.72	Joback Method
dvisc	0.0014458	Paxs	357.67	Joback Method
dvisc	0.0012105	Paxs	400.62	Joback Method
dvisc	0.0010489	Paxs	443.57	Joback Method
dvisc	0.0009322	Paxs	486.52	Joback Method
dvisc	0.0008444	Paxs	529.47	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=R524626&Units=SI
Crippen Method:	http://pubs.acs.org/doi/abs/10.1021/ci9903071
Crippen Method:	https://www.chemeo.com/doc/models/crippen_log10ws

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

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